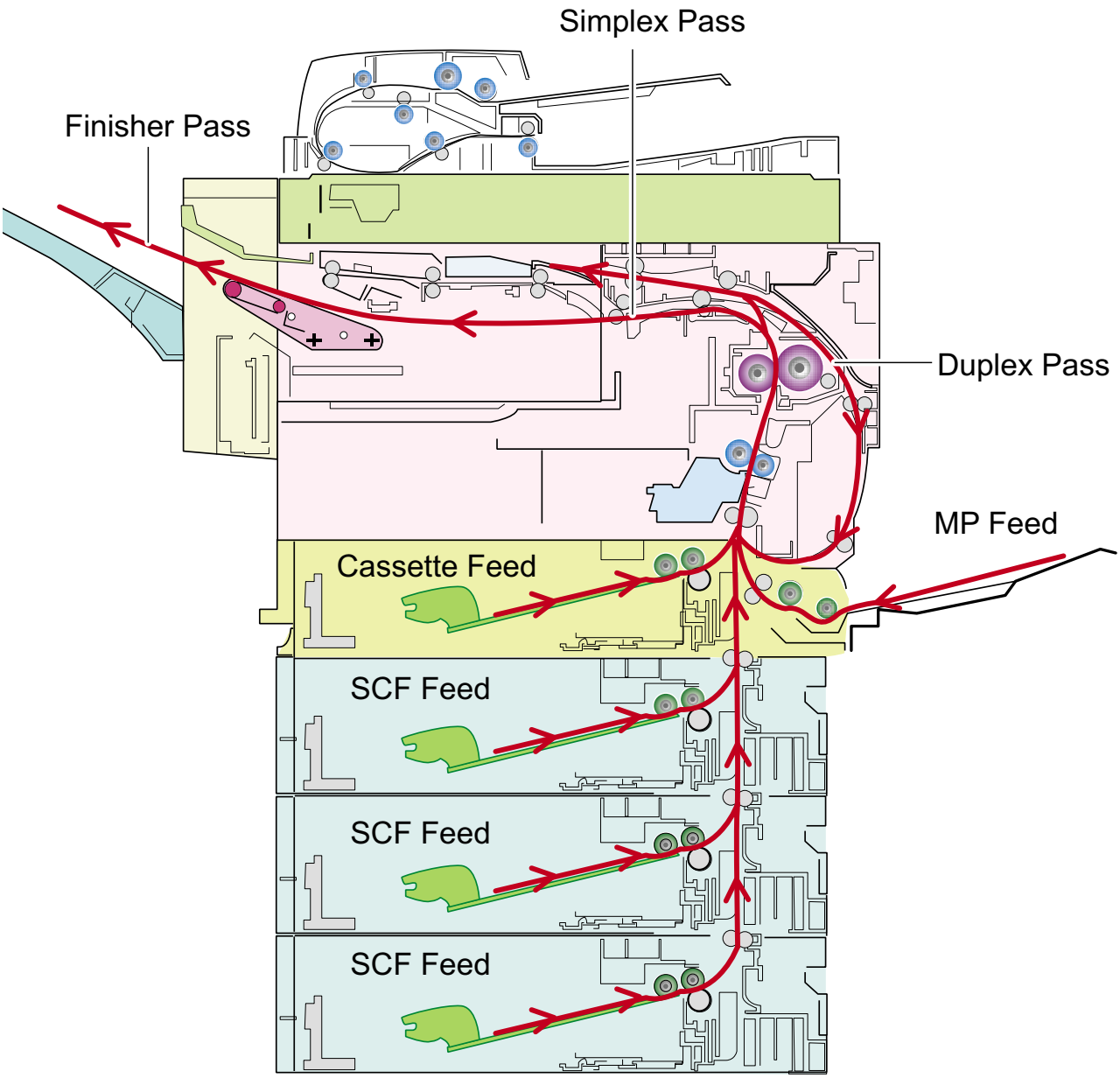
4. Alignment and Adjustments

This chapter describes some of the main service procedures including:
Using the Tech Mode; Clearing paper jam and test patterns.
Much of this chapter is also included in the user's guide.

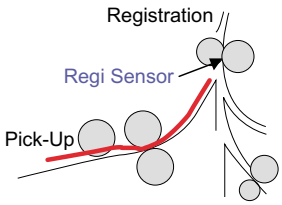
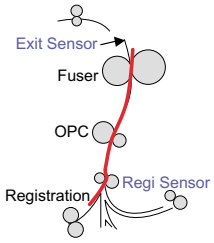
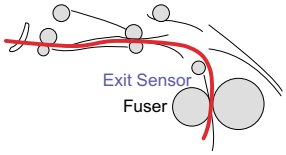
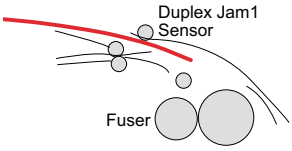
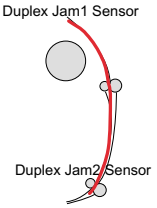
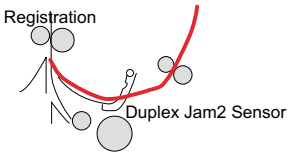
4.1 Paper path



4.2 Clearing Paper Jams

If a paper jam occurs an error message appears in the LCD display.
Find and remove the jammed paper.
If you don't see the paper, open the covers.
Do not use a tweezers, pincers or other metal tools when clearing a paper jam.
This could damage the internal mechanism causing print quality problems or possibly electrical shock.

[Engine Jam Type]

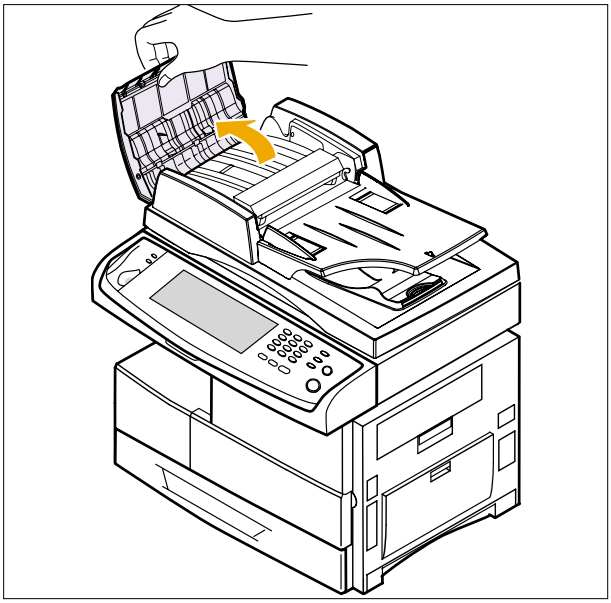
Type	Case	Jam Removal	Jam Layout	Photo
Jam 0	Leading edge of media does not arrive at registration within a certain time after pick-Up(If fails at a time, it tries pick-up again)	1. Pull out cassette 2. Remove jammed paper		
Jam 1	Leading edge of media does not arrive at Exit Sensor within a certain time after registration	1. Open side cover 2. Remove jammed paper		
Jam 2	Trailing edge of media does not leave Exit Sensor within a certain time after touching Regi Sensor	1. Open side cover 2. Remove jammed paper Or 1. Remove jammed paper from exit		
Duplex Jam 1	Trailing edge of media leaves Exit Sensor, and does not arrive at Duplex Jam1 Sensor	1. Open side cover 2. Remove jammed paper Or 1. Remove jammed paper from exit		
Duplex Jam 2	Leading edge of media does not arrive at Duplex Jam2 Sensor after touching Duplex Jam1 Sensor	1. Open Side Cover 2. Remove jammed paper		
Duplex Jam 0	Leading edge of media does not arrive at Registration after touching Duplex Jam2 Sensor	1. Open Side Cover 2. Remove jammed paper		

4.2.1 Clearing Document Jams

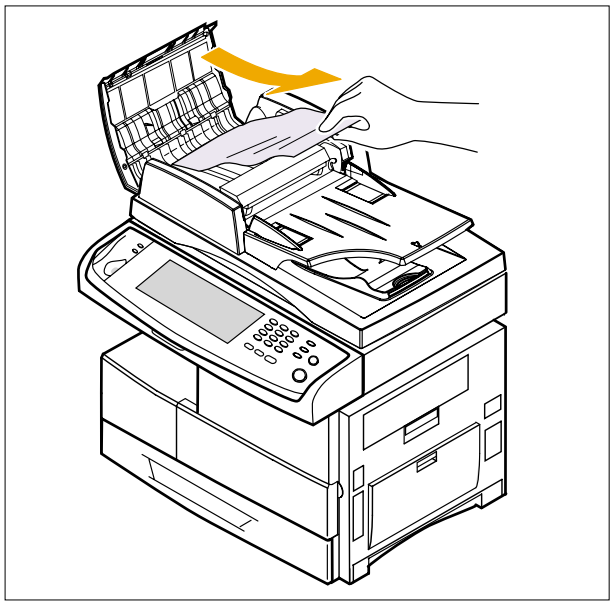
When an original jams while passing through the DADF, [Document Jam] appears on the display.

1. Remove any remaining pages from the DADF.

2. Open the DADF cover.



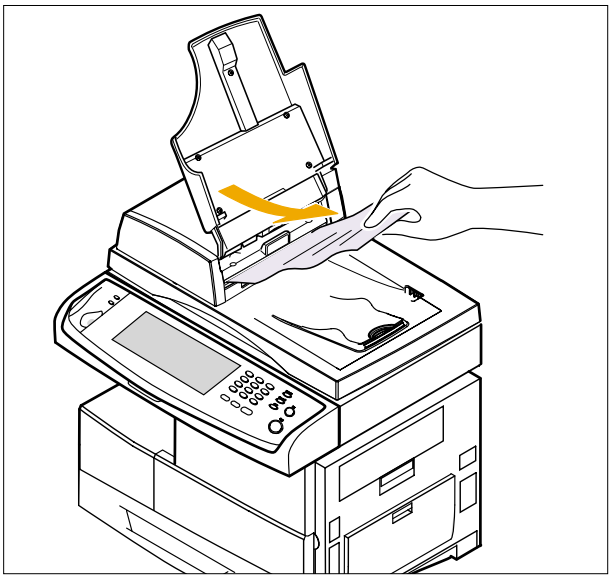
3. Pull the jammed paper gently out of the DADF.



4.2.1.1 Exit Misfeed

1. Remove the remaining documents from the DADF.

2. Open the document input tray upward and pull the document gently out of the DADF.

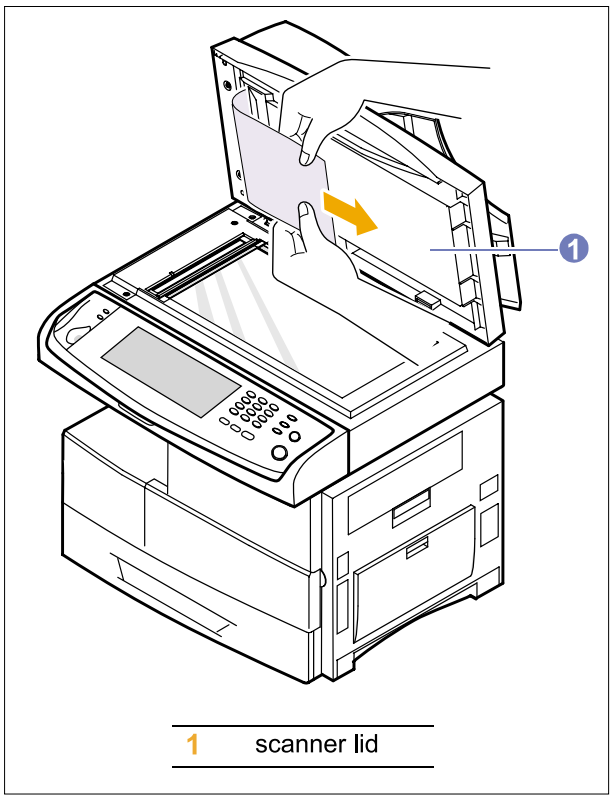


3. Close the document input tray. Then place the documents back into the DADF.

4.2.1.2 Roller misfeed

1. Open the scanner lid.

2. Seize the misfed paper, and remove the paper from the feed area by carefully pulling it to the right using both hands.



1 scanner lid

3. Close the scanner lid. Then load the removed pages back into the DADF.

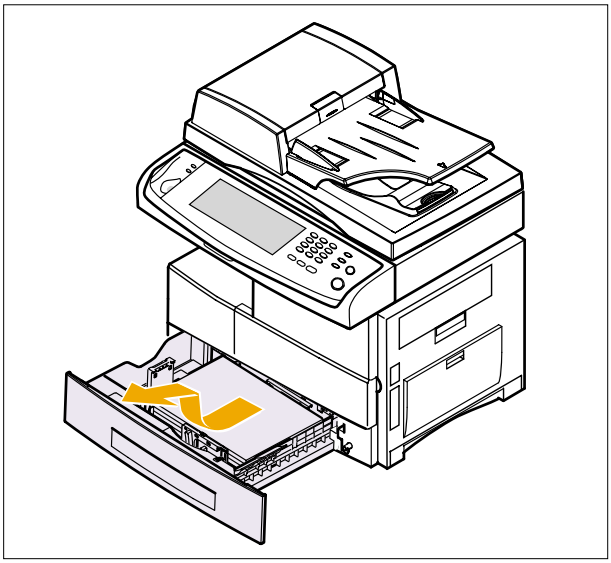
4.2.2 Clearing paper jams

When a paper jam occurs, Paper Jam appears on the display. Refer to the table below to locate and clear the paper jam.

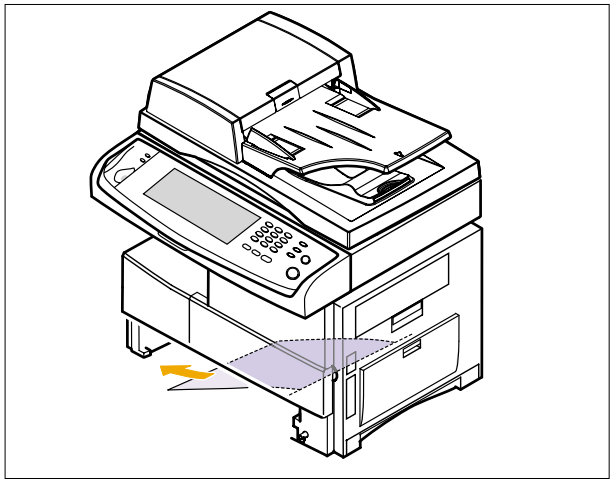
Message	Location of jam
[Paper Jam 0] Open/Close Door	In the paper feed area (tray 1, optional tray 2, or multi-purpose tray)
[Paper Jam 1] Open/Close Door	In the fuser area or around the toner cartridge
[Paper Jam 2] Check Inside	In the paper exit area page
Duplex Jam Open/Close Door	In the duplex unit page

4.2.2.1 In the tray 1

1. Pull out the paper Tray to open. After you pull it out completely, lift the front part of the Tray slightly up to release the Tray from the machine.



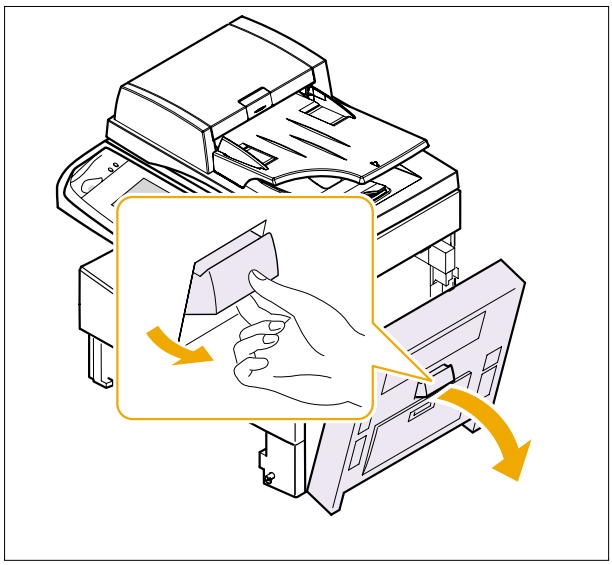
2. Remove the jammed paper by gently pulling it straight out.



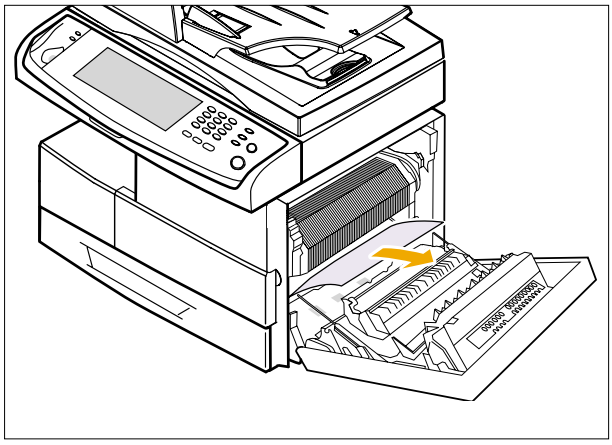
Once you remove the jammed paper here, open the side cover and then close it to clear the "Paper Jam0" message on the display.

If there is any resistance, and the paper does not move immediately when you pull, stop pulling. Then:

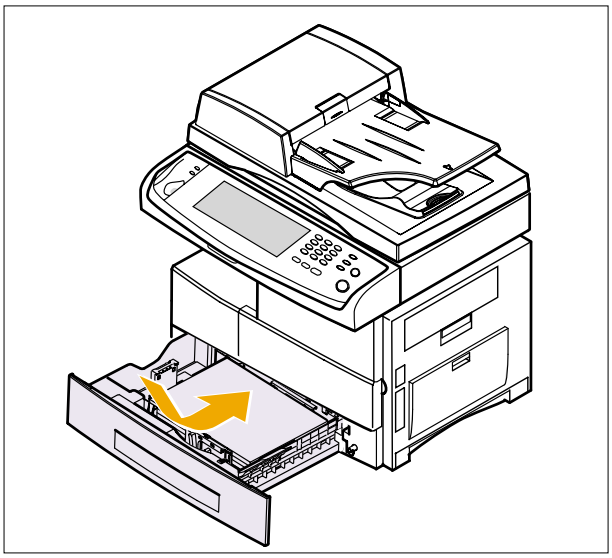
3. Open the side cover.



4. Carefully remove the misfed paper in the direction shown.

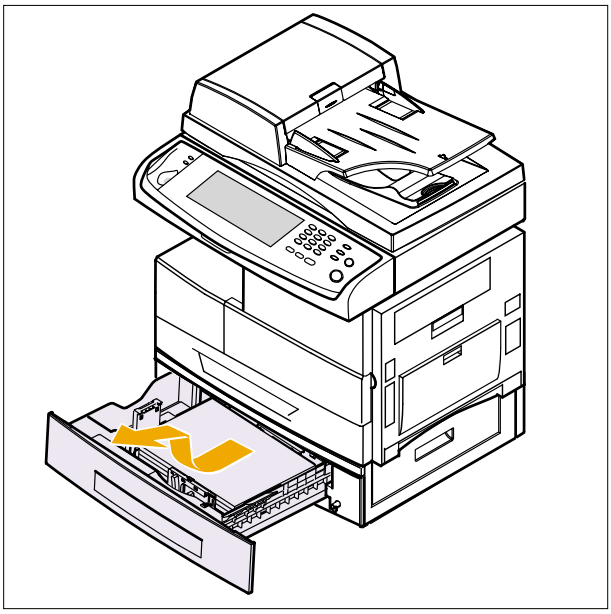


5. Close the cover and insert the paper Tray. Lower the rear part of the Tray to align the rear edge with the corresponding slot of the machine, then insert it completely.



4.2.2.2 In the optional tray 2

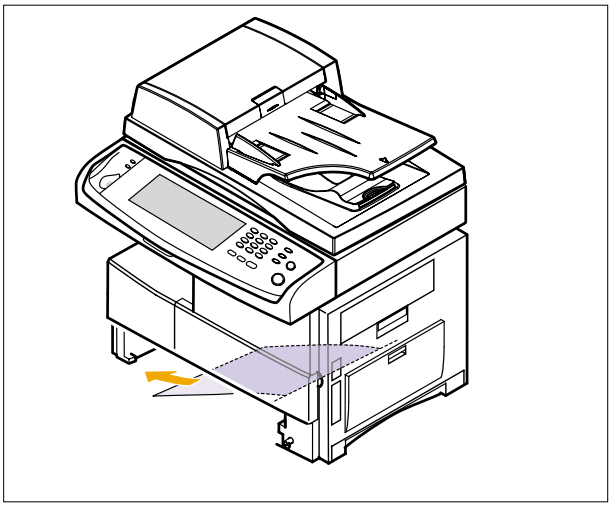
1. Pull the optional tray 2 open.
2. Pull the paper Tray to open. After you pull it out completely, lift the front part of the Tray slightly up to release the Tray from the machine.



If the paper does not move when you pull, or if you do not see the paper in this area, stop and go to step 3.

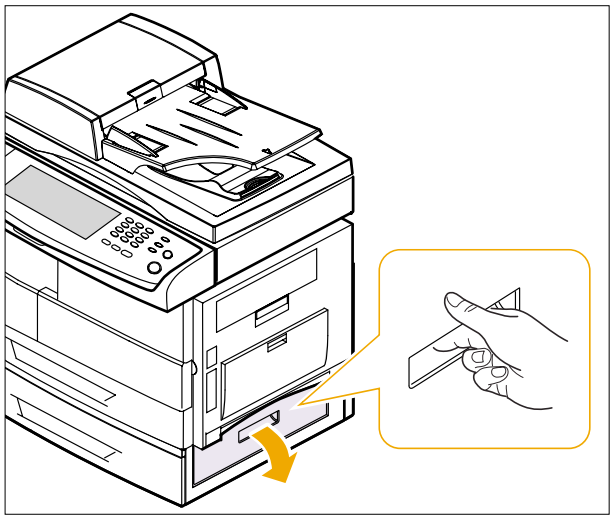
3. Pull the tray 1 half.

4. Remove the paper in the direction shown. To avoid the paper torn, pull it out gently and slowly.

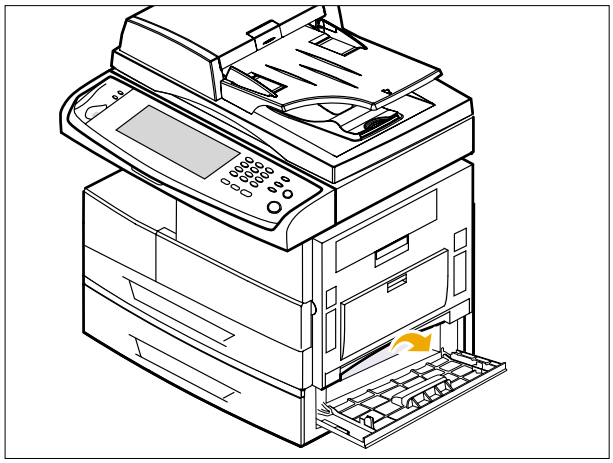


If you cannot find the jammed paper, or if there is any resistance removing the paper, stop pulling and continue to step 5.

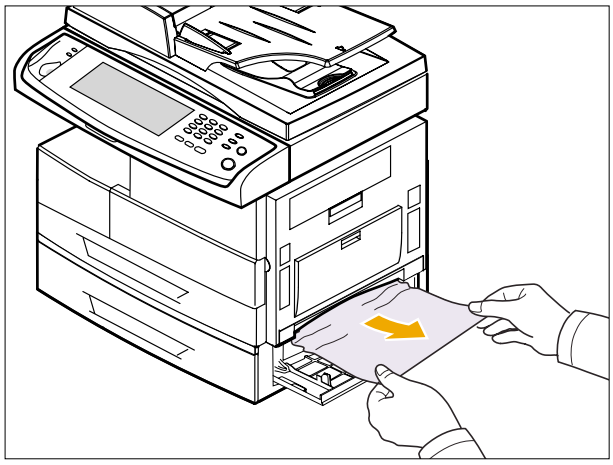
5. Open the outer jam cover in tray2.



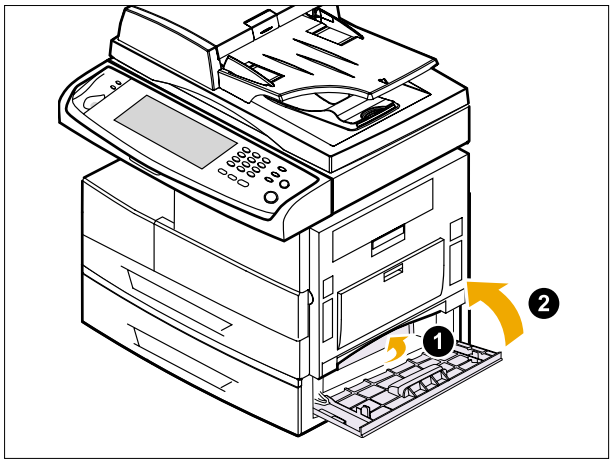
6. Open the inner cover of tray2.



7. Pull the jammed paper out in the direction shown. To avoid tearing the paper, pull it out gently and slowly.

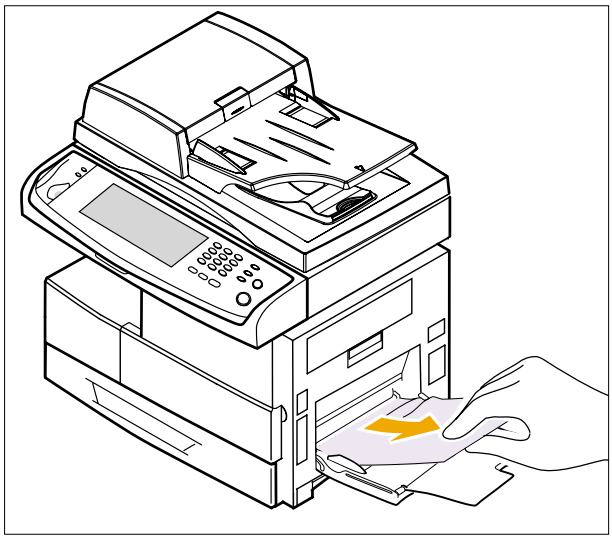


8. Close the two jam covers.

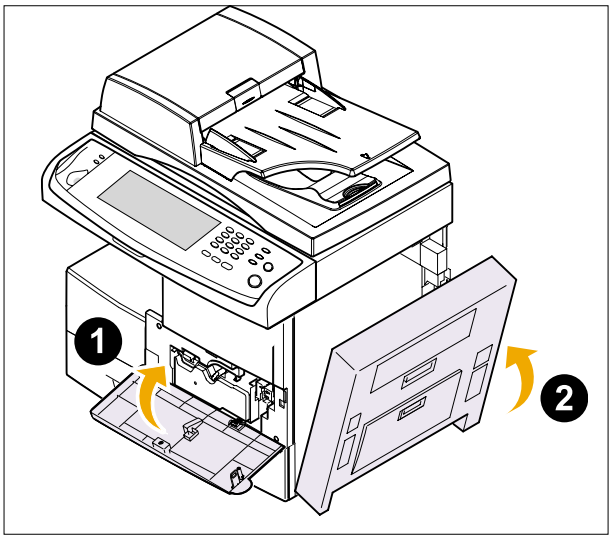


4.2.2.3 In the multi-purpose tray

1. If the paper is not feeding properly, pull the paper out of the machine.



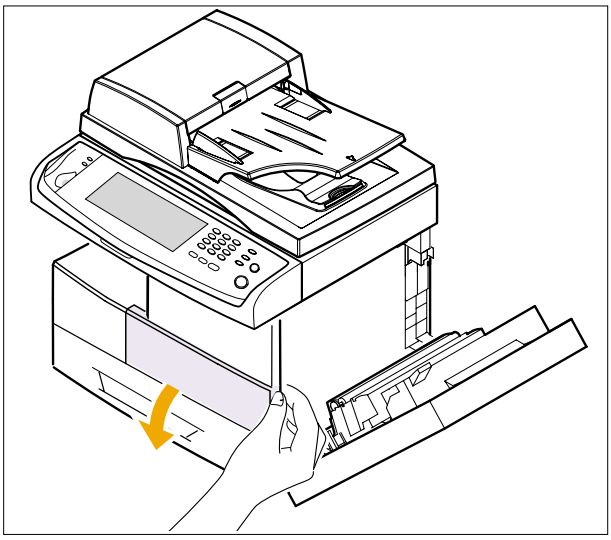
2. Open and close the front cover to resume printing.



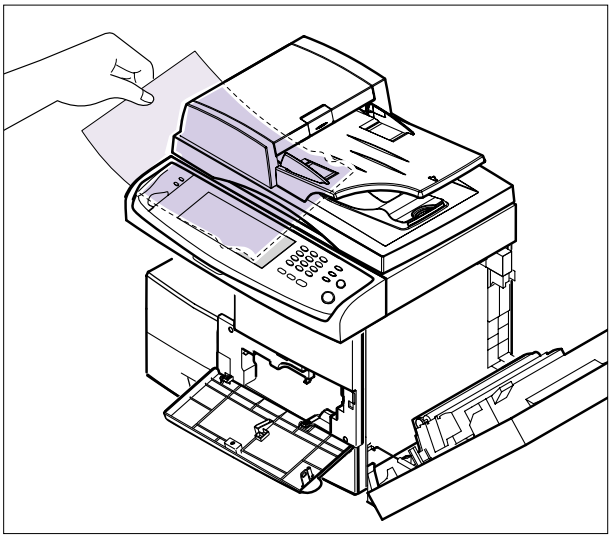
4.2.2.4 In the paper exit area

1. Open the side cover.

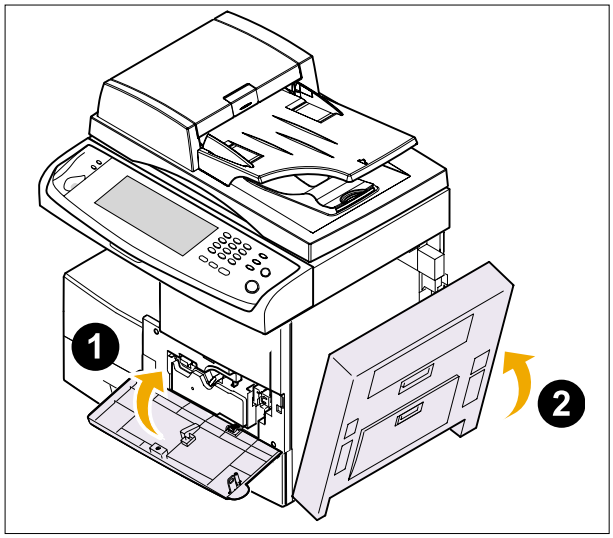
2. Open the front cover.



3. Gently pull the paper out through the exit area.



4. Close the front cover ❶ and the side cover ❷.
   Printing automatically resumes.

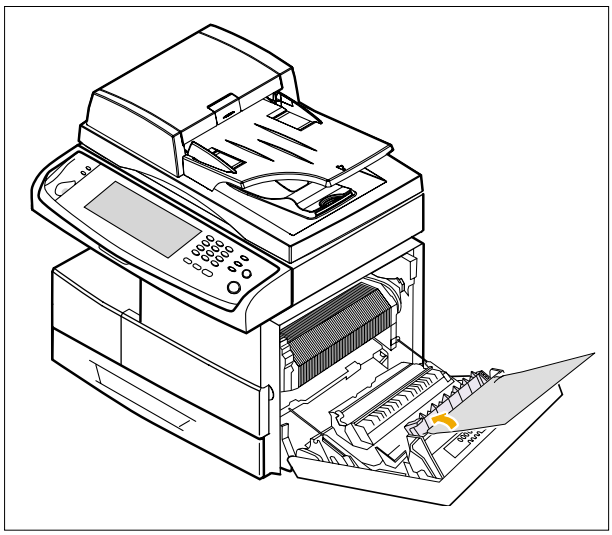


4.2.2.5 In the duplex unit area

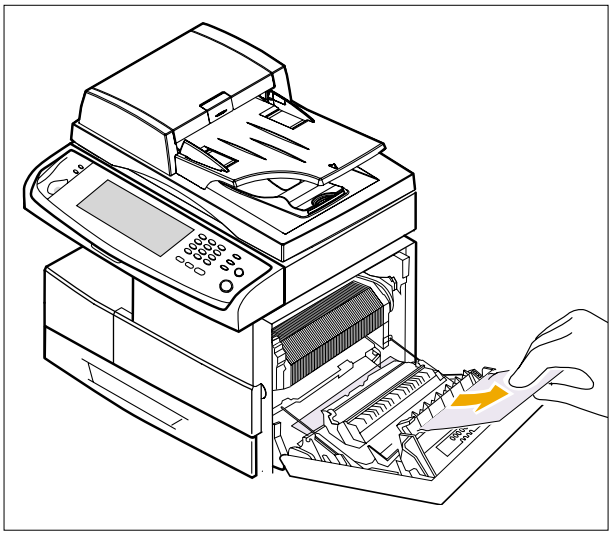
If the duplex unit is not inserted correctly, paper jam may occur. Make sure that the duplex unit is inserted correctly.

1. Open the side cover.

2. Pull the guide exit.



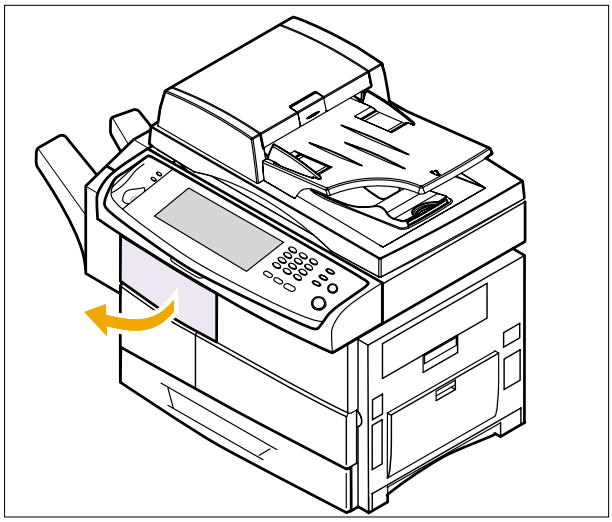
3. Remove the jammed paper.



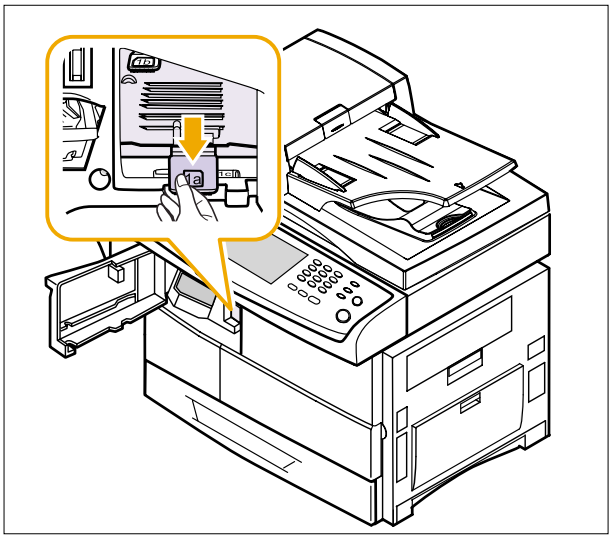
4. Close the side cover.

4.2.2.6 In the stacker

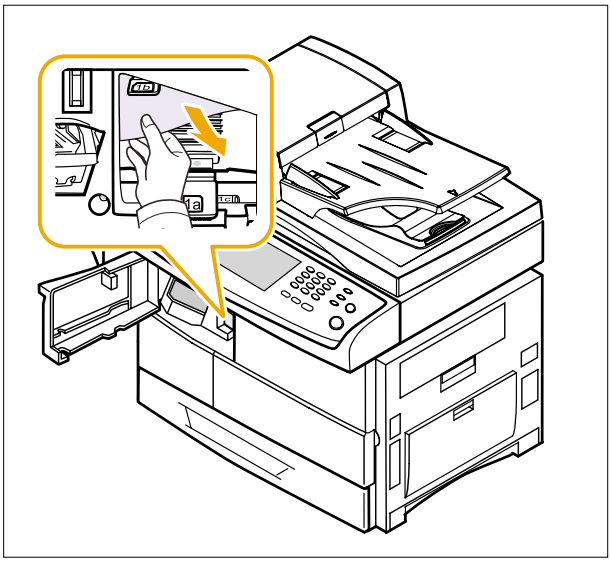
1. Open the stacker cover.



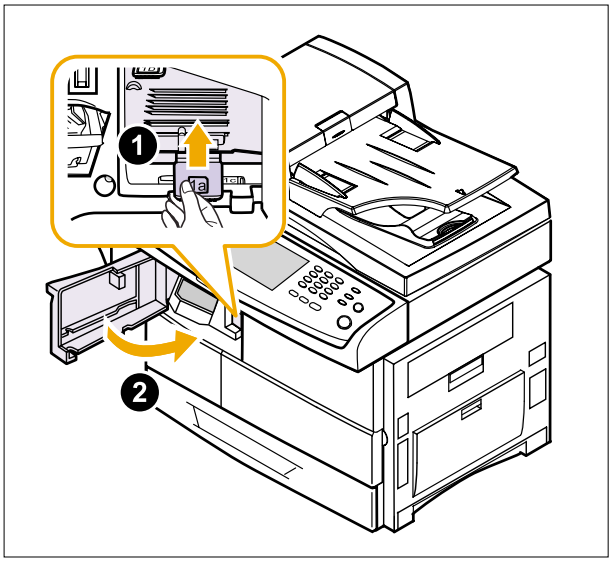
2. Push the stacker lever down.



3. Remove the jammed paper.

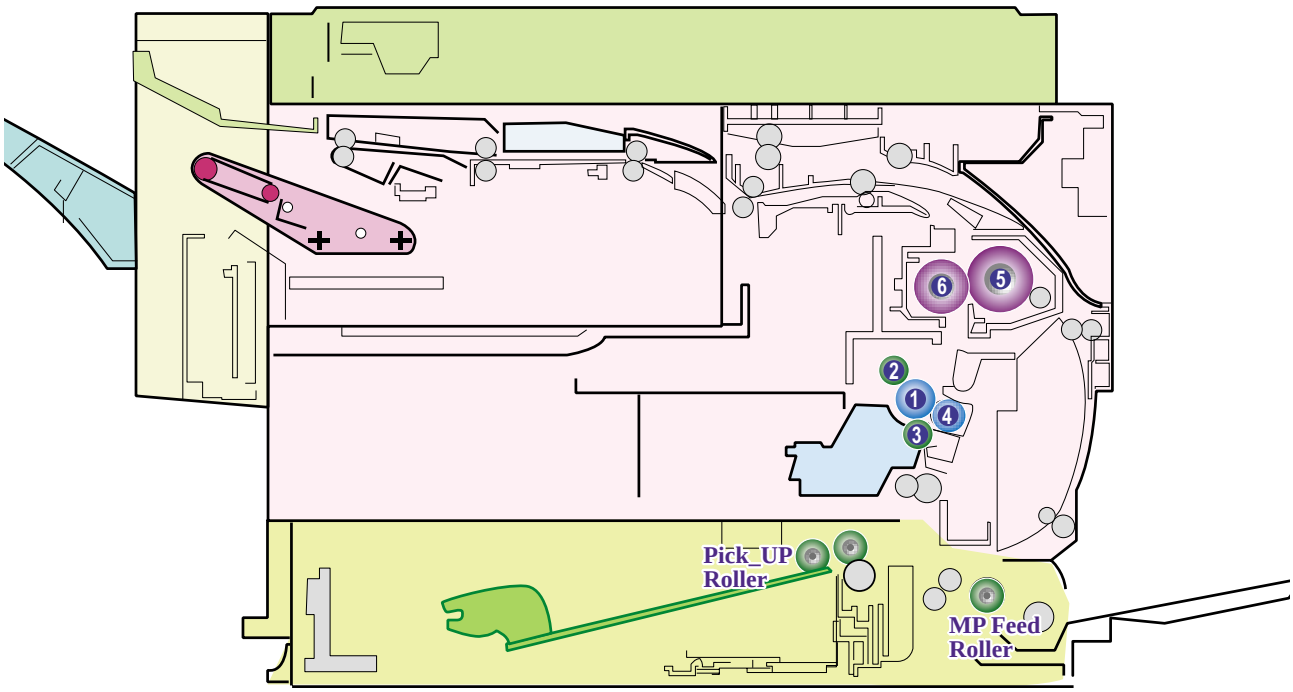


4. Pull up on the stacker lever and then close the stacker cover.



4.3 Abnormal Image Printing and Defective Roller

If a mark or other printing defect occurs at regular intervals down the page it may be caused by a damaged or contaminated roller. Measure the repetition interval and refer to the table below to identify the roller concerned.



1 OPC Drum
2 Charge Roller
3 Developing Roller
4 Transfer Roller
5 Heat Roller
6 Pressure Roller

No	Roller	Abnormal image period	Kind of abnormal image
1	OPC Drum	94.30mm	White spot, Block spot
2	Charge Roller	43.96mm	Black spot
3	Develop Roller	39.25mm	Horizontal density band
4	Transfer Roller	57.14mm	Black side contamination/transfer fault
5	Heat Roller	125.6mm	Black spot and fuser ghost
6	Pressure Roller	157mm	Black side contamination

4.4 User Mode

The conrol panel provides access to various menus to seup the machine or use the machine's funcions. These menus can be accessed by pressing Menu. Refer to the following diagram. Menus available in Fax, Copy, or Scan mode vary.

*Default Value

Main	1Depth	2Depth	3Depth	4Depth	5Depth	6Depth
General	**Device Info**	Service Center Registration	Phone Number			
			E-mail Address			
		Contact Info	Using Place			
			Phone Number			
	Date & Time	Set Date & Time	Year,Month,Day, Hour,Date			
		Date Format	*MM/DD/YY YY/MM/DD DD/MM/YY			
		Time Format	*12 Hour 24 Hour			
	Default Settings	**Default Option**	**Copy**	Output	Collated Uncollated Staple,Portrait Staple,Landscape	
				Reduce/Enlarge	Original(100%) Custom Auto Fit LGL->LTR(78%) LGL->A4(83%) A4->A5(71%) A4->LTR(94%) A5->A4(141%) EXE->LTR(104%) 25% 50% 150% 200% 400%	
				Duplex	1 -> 1 Sided 1 -> 2 Sided 1 -> 2 Sided, Rotate Side 2 2 -> 1 Sided 2 -> 2 Sided 2 -> 1 Sided, Rotate Side 2	
				Paper Supply	Auto MP Tray Tray1 Tray2 Tray3 Tray4	
				Original Type	Text Text/Photo Photo	
				Darkness	Light Dark < | | | | | >	
				Erase Background	Off On	
				Erase Edge	Off Border Erase Small Original Erase Hole Punch Erase	
			Fax	Resolution	Standard Fine Super Fine	
				Original Type	Text Text/Photo Photo	
				Darkness	Light Dark < | | | | | >	
				Color Mode	Color Mono	
				Erase Background	Off On	

Main	1Depth	2Depth	3Depth	4Depth	5Depth	6Depth
General	**Default Settings**	**Default Option**	**Email**	Resolution	100 dpi 200 dpi 300 dpi 400 dpi 600 dpi	
				Darkness	Light Dark < | | | | | >	
				Original Type	Text Text/Photo Photo	
				Color Mode	Color Grey Mono	
				Erase Background	Off On	
				Scan to Edge	Off On	
				Quality	Best Normal Draft	
				File Format	PDF Multi-Page TIFF Single-Page TIFF JPEG	
			Scan to Server	Resolution	100 dpi 200 dpi 300 dpi 400 dpi 600 dpi	
				Darkness	Light Dark < | | | | | >	
				Original Type	Text Text/Photo Photo	
				Color Mode	Color Grey Mono	
				Erase Background	Off On	
				Scan to Edge	Off On	
				Quality	Best Normal Draft	
				File Format	PDF Multi-Page TIFF Single-Page TIFF JPEG	
				Filing Method	Overwrite Cancel Change Name	
			Paper Size	A4		
				Letter		
	Measurements	**Unit**	*Inches			
			mm			
		Numeric Separations	*Comma (12,345)			
			Period (12,345)			
	Timers	**System Timeout**	On (1~10 min) *5	System Time out [01-10]min < ## >		
			Off			
	Languege	*English				

Main	1Depth	2Depth	3Depth	4Depth	5Depth	6Depth
	Energy Saver	Scan Power Save	30min 60min 120min			
		Power Save	5min 15min 30min 45min 60min 120min			
		Low Power Save	5min 15min 30min 45min 60min 120min			
General	**Tray Management**	Tray1	Paper Size	Letter Legal Folio A4 JIS B5 Executive A5 A6 Oficio Envelop Monarch Envelope COM-10 Envelope DL Envelope C5 Envelope C6 ISO B5 Post Card 4x6 Statement Custom		
			Paper Type	Plain Letterhead Thick Thin Cotton Colored Pre-Printed Recycled Envelope Transparency Label Cardstock Bond Punched Archive		
			Tray Confirmation Message	Off On		
		Tray2	Paper Size	same as above		
			Paper Type	same as above		
			Tray Confirmation Message	same as above		
		Tray3	Paper Size	same as above		
			Paper Type	same as above		
			Tray Confirmation Message	same as above		
		Tray4	Paper Size	same as above		
		Mp Tray	Paper Size	same as above		
			Paper Type	same as above		
			Tray Confirmation Message	On/Off		
		Auto Tray Switch	Off On			
		Auto Continue	Off On			
	Altitude Adjustment	Normal				
		High 1				
		High 2				
		High 3				
	Output Option	Out of Staples Options	Complete job without stapling			
			Fault/Held Job			
		Within Job Offsetting	Off On			

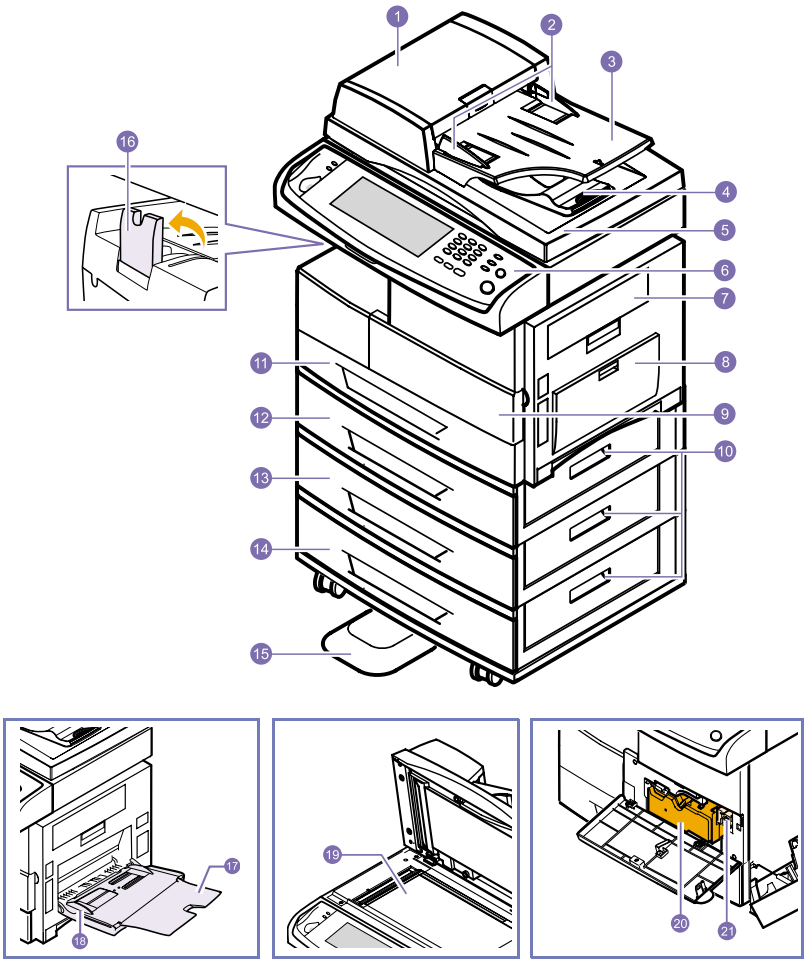
Main	1Depth	2Depth	3Depth	4Depth	5Depth	6Depth
General	**Sound**	Fault	Off			
			*Low			
			Medium			
			High			
			Test			
		Conflict	Off			
			*Low			
			Medium			
			High			
			Test			
		Selection	Off			
			*Low			
			Medium			
			High			
			Test			
	Supplies Management	Drum Cartridge Reorder Notification	Drum Reorder at Life Remaining	1%, 5%, 10%, 15%		
		Toner Cartridge Reorder Notification	Toner Reorder at Life Remaining	1%, 5%, 10%, 15%		
		Fuser Counter Reset	Pop up window Yes/No			
		Bias Transfer Roller Counter Reset	Pop up window Yes/No			
		Feed Roller Counter Reset	Tray1			
			Tray2			
			Tray3			
			Tray4			
			Bypass			
			Document Feeder Roller			
		Doc. Feeder Friction Pad Counter Reset	Pop up window Yes/No			
	Machine Test	Image Quality Test Pattens	Image Quality Test Pattens	1-8		
			Pattern Print Tray Source	Tray1 ~ Tray4		
			Number of Pattern Prints	1~999		
			2 Sided	1Sided / 2Sided		
	Ignore Toner Empty Status	On/Off				
Setup	**Copy Setup**	Page Number	Off			
			On			
		Time & Date	Off			
			On			
		ID Stamp	Off			
			On			
	Fax Setup	Terminal ID	ID Name			
			Fax Number			
		Remote Code	On/Off			
		Error Correction Mode	On/Off			
		Fax Initial Setup	Receive Mode	Telephone		
				*Fax		
				Answering Machine/Fax		
			Dial Type	*DP		
				MF		
		Auto Answer Delay	1-7 Rings			
		Receive Header	Eable/Disable			
		Secure Receive	On/Off			
		Received Fax Printing	Rx Reduction Printing	Off	Discard Size (0-30 mm)	
				*On		
		Redial	Redial Time Interval	[1-15] *3		
			Redial Attempts	[0-13] 7		
		Speaker Volume (Audio Line Monitor)	Off			
			Comm.			
			*On			
		Prefix Dial	Off / On	Prefix Dial (Max 5 digits)		
		Junk Fax Number List	Select from list			
		Ring Volume	Off			
			*Low			
			Medium			
			High			
		Dial Tone Volume	1-7			
		Output Option	Duplex	Off		
				Long Edge On		
				Short Eege		
			Stapled	Off		
				On		
		Output Tray	MP Tray	On/Off		
			Tray1	On/Off		
			Tray2	On/Off		
			Tray3	On/Off		
			Tray4	On/Off		

Main	1Depth	2Depth	3Depth	4Depth	5Depth	6Depth
		Mailbox Setup	Document Policy	Delete on Poll	On/Off	
				Delete on Print	On/Off	
			Mailbox Configuration	Edit Mailbox	Mailbox ID	20 string
					Mailbox Name	20 string
					Mailbox Passcode	20 string
					Notification	Off
						On
				Delete Mailbox		
Setup	**Network Setup**	TCP/IP Protocol	IP Setting	*DHCP BOOTP		
				Static	IP address	
					Subnet mask	
					Gateway	
			DNS Configuration	Domain Name		
				Preferred DNS Server	xxx.xxx.xxx.xxx	
				Altenate DNS Server #1	xxx.xxx.xxx.xxx	
				Altenate DNS Server #2	xxx.xxx.xxx.xxx	
				Dynamic DNS	Enable	
					Disable	
			HTTP Protocol	Enable		
				Disable		
		Netware Setting	Protocol	On		
				*Off		
			Print Server	Print Server Name		
				*Print Server Password		
			Frame Type	*[Auto] [EN_802.3] [EN_802.2] [EN_II]		
			Primary File Servers	Primary File Server		
			Rates	Poll Interval	1-240 seconds	
				*SAP	*Enable	
					Disable	
			NDS Setting	Name Context		
				Directory Service Tree		
		AppleTalk Protocol	On			
			*Off			
	Authentication	Authentication Mode	Network Accounting			
			Foreign Devie Interface			
			No Authentication Mode			
		Foreign Device Interface Configuration	Job Timer	Enable / Disable		
			Print Job Control	Enable/Disable		
			Inhibit Services	Copy Only / All Services		
			Internal Credits	Enable / Disable		
			Image Counter	Charge / No Charge		
		Change Admin. Password	Old Password New Password Confirm Password			
	Optional Service	N/W Scan	Enable/Disable			
		Analog Fax	Enable/Disable			
	Remote Service	Remote Service	On/*Off			
		Criteria Value	Pages(1~9999)			
			Days (1~9999)			
		Service Number	Service Numer 1			
			Service Numer 2			
			Service Numer 3			
			Service Numer 4			
			Service Numer 5			
Print / Report	**Print**	Network Configuration				
		PS3 Font List				
		PCL Font List				
		Schedule Jobs Report				
	Accounting Reports	Supplies Information				
		Network Auth. Log Report				
		Counter Information				
		Usage Page Report				
	Report	Configuration Report	*Print at Power On			
			Do not print at Power On			
			Print Now			
		Fax Report	Multi Send Report	*Off		
				On		
				On-Error		
			Fax Send Report Appearance	Reduced		
				*No Image		

4.4.1 Machine overview

These are the main components of your machine:

4.4.1.1 Front view

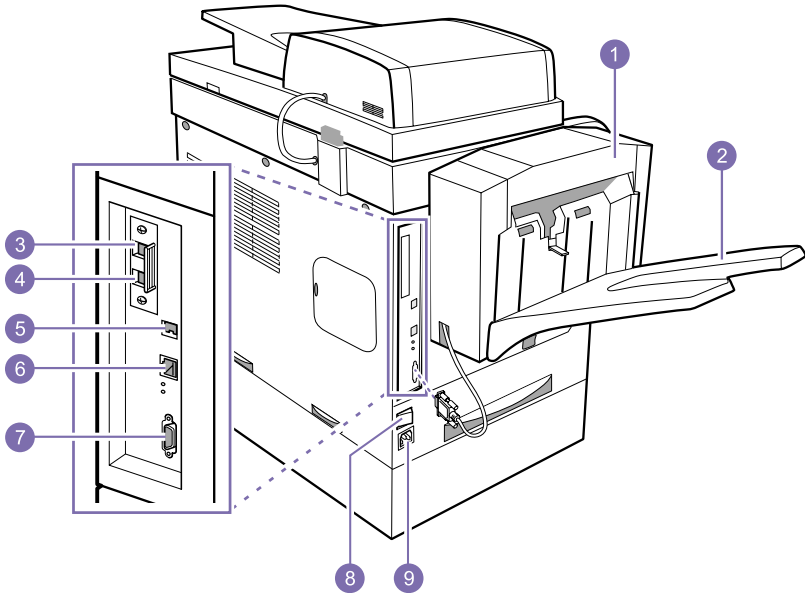


* The figure above shows an SCX-6345N with all available accessories.

1	DADF (Duplex Automatic Document Feeder)
2	document width guides
3	document input tray
4	document output tray
5	scanner lid
6	control panel
7	side cover
8	multi-purpose tray
9	front cover
10	optional tray jam cover
11	tray 1

12	optional tray 2
13	optional tray 3
14	optional tray 4
15	optional tray stand
16	output support
17	multi-purpose tray extension
18	multi-purpose tray paper width guides
19	scanner glass
20	toner cartridge
21	drum cartridge

4.4.1.2 Rear view

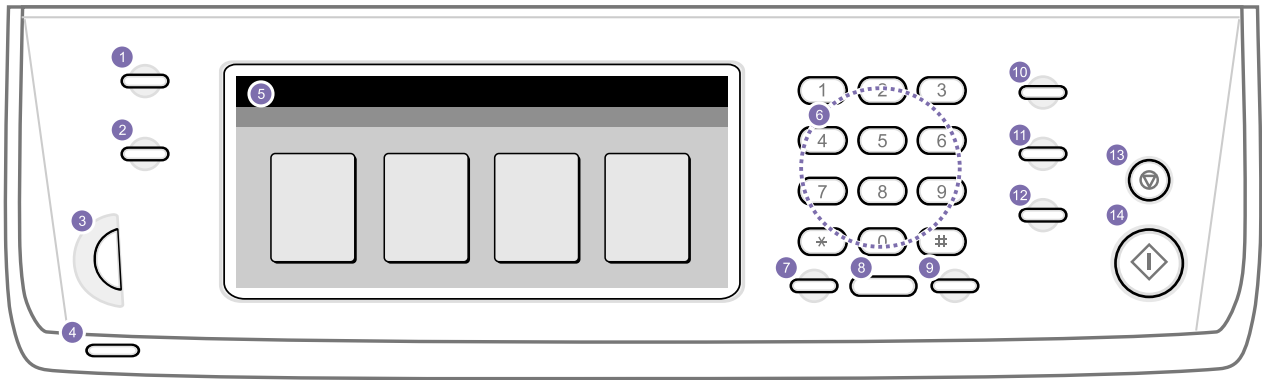


* The figure above shows an SCX-6345N with all available accessories.

1	optional stacker & stapler
2	optional stacker output tray
3	extension telephone socket (EXT)
4	telephone line socket (LINE)
5	USB port

6	network port
7	optional stacker connection
8	power switch
9	power receptacle

4.4.1.3 Control panel overview

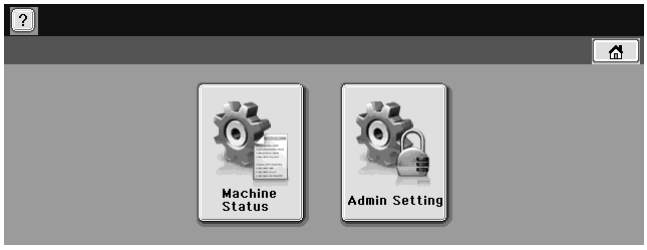


1	**Machine Setup:** Sets the value of machine setup.
2	**Job Status:** Enters job status menu which shows the current running jobs, waiting jobs or completed jobs.
3	**Screen brightness dial:** adjusts the brightness of the touch screen.
4	**Status:** Shows the status of your machine.
5	**Screen:** Displays the current machine status, prompts during an operation, and user can set manus since it is the touch screen.
6	**number keypad:** dials fax number, enters the number of copied document or option values.
7	**Clear:** Deletes character of string in the editing area of screen.

8	**Redial/Pause:** In Standby mode, redials the last number, or in Edit mode, inserts a pause into a fax number.
9	**On Hook Dial:** Engages the telephone line.
10	**Power Saver:** Enters the machine into the power save mode.
11	**Interrupt:** Stops a progressing job for urgent copy job.
12	**Clear All:** Sets the machine with default values.
13	**Stop:** Stops an operation at any time. The pop up window appears on the screen showing the current job that user can stop or resume.
14	**Start:** Starts a job.

4.4.1.4 Machine Setup button

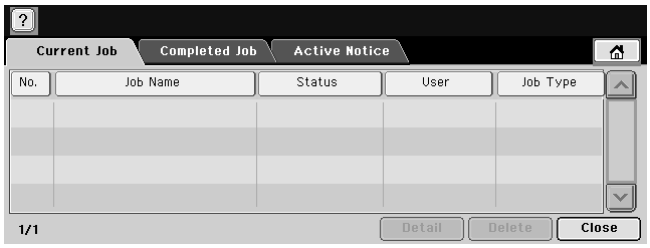
With this button, you can browse current machine settings and set machine values.



- Machine Status: shows the current status of the machine.
- Admin Setting: allows an administrator to set up the machine.

4.4.1.5 Job Status button

When user presses Job Status button, LCD shows the currently running, queued jobs and completed jobs.



- Current Job tab: shows the list of jobs in progress and pending.
- Completed Job tab: provides the list of completed jobs.
- Error List tab: shows the list of errors that occurred in the machine.
- No.: gives the order of jobs. The job in No. 001 is currently in progress.
- Job Name: shows job information like name and type.
- Status: gives the current status of each job.
- User: provides user name, mainly computer name.
- Job Type: displays details of the active job, such as job type, recipient phone number and other information.
- Delete: removes the selected job from the list.
- Close: closes the job status window and switches to previous view.

4.4.1.6 Status

Status	Description
Off	· The machine is off-line. · The machine is in Power Save mode. When data is received, or any button is pressed, it switches to on-line automatically.

Status" LED		Description
Green	On	The machine is on-line and can be used.
	Blinking	· When the backlight slowly blinks, the machine is receiving data from the computer. · When the backlight blinks rapidly, the machine is printing data.
Red	On	· The toner cartridge is totally Out of lifespan. Remove the old toner cartridge and install a new one. · The drum cartridge is totally empty. Remove the old drum cartridge and install a new one. · A paper jam has occurred. · The front cover is open. Close the cover. · The machine has stopped due to a major error. Check the display message.
	Blinking	· A minor error has occured and the machine is waiting the error to be cleared. Check the display message. When the problem is cleared, the machine resumes. · The toner cartridge is low. Order a new toner cartridge. You can temporarily improve print quality by redistributing the toner.

4.4.1.7 Touch Screen

The touch screen allows for user-friendly operation of the machine.

Once you press the home icon ( ) on the screen, it shows the Main screen.

- : Shows Help. You can find the explanation by feature contents.
- Copy: Enters the Copy menu.
- Fax: Enters the Fax menu. (Optional)
- Scan: Enters Scan to Email, NetScan, Scan to Server menu. (Optional)
- Stored Documents: Enters the Stored Documents menu.
- Logout: Logs out from the currently logged in account.

4.4.1.8 Power Saver button

When the machine is not in use, save electricity with the provided power save mode. Puts the machine into power save mode.

Status		Description
Off		The machine is not in power save mode.
Green	On	The machine is in power save mode.

4.4.1.9 Interrupt button

When you press this button, the machine goes into interrupt mode which means it stops a printing job for urgent machine use.

Status		Description
Off		The machine is not in interrupt printing mode.
Green	On	The machine is in interrupt printing mode.

Note: *Interrupt mode is resumed at default value (Off) after the machine is shut down or reset.*

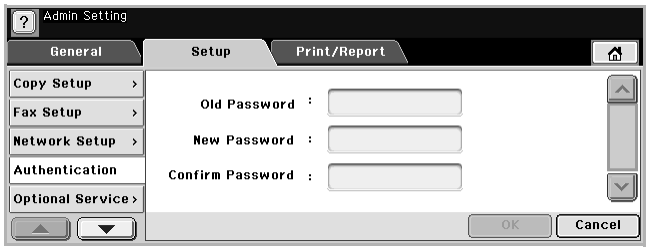
4.4.2 Machine's basic settings

After setting up the machine, you may need to set the machine's basic features. Check the next explanation if you would like to set or change values.

4.4.2.1 Setting log in password

To set your machine up or change the settings, you have to login. To change passwords, follow the next steps.

1. Press Machine Setup on the control panel.
2. Press Admin Setting.
3. Login message appears, enter password (Factory setting: 1111) with number keypad and press OK.
4. Press Setup tab > Authentication.
5. Press Change Admin Setting Password.



6. Enter old password and new password.
7. Press OK.

4.4.2.2 Setting the date and time

The current date and time are shown on the display when your machine is on and ready to work.

1. Press Machine Setup on the control panel.
2. Press Admin Setting.
3. Login message appears, enter password with number keypad and press OK.
4. Press General tab > Data/Time > Set Date/Time.
5. Select date and time using left/right arrows.
   Note: To change the format of date and time, press Date Format and Time Format.
6. Press OK.

4.4.2.3 Changing the display language

To change the language that appears on the touch screen, follow these steps.

1. Press Machine Setup button in the control panel.
2. Press Admin Setting.
3. Login message appears, enter password with number keypad and press OK.
4. Press General tab.
5. Press down arrow to switch the screen, press Language.
6. Select language.
7. Press OK.

4.4.2.4 Setting job timeout

When there is no input, the machine waits for a specific time. You can set the amount of time the machine will wait.

1. Press Machine Setup on the control panel.
2. Press Admin Setting.
3. Login message appears, enter password with number keypad and press OK.
4. Press General tab.
5. Press Timers.
6. Select System Timeout.
7. Select On.
8. Select time using left/right arrows.
9. Press OK.

4.4.2.5 Setting the tray and paper

You can select the tray and paper you use for printing job.

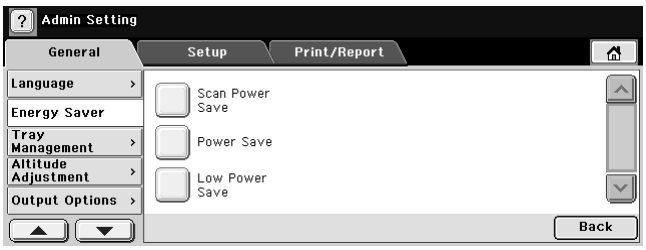
1. Press Machine Setup on the control panel.
2. Press Admin Setting.
3. Login message appears, enter password with number keypad and press OK.
4. Press General tab.
5. Press down arrow to switch the screen, press Tray Management.
6. Select tray and its options such as paper size, type, and Tray Confirmation Message.
7. Press OK.

4.4.2.6 Using energy saving feature

The machine provides energy saving features.

- Scan Power Save: reduces machine's power consumption when it is not in actual use.
- Power Save: saves power by turning off the scan lamp. The scan lamp under the scanner glass automatically turns off when it is not in use to reduce power consumption and extend the life of the lamp.

1. Press Machine Setup on the control panel.
2. Press Admin Setting.
3. Login message appears, enter password with number keypad and press OK.
4. Press General tab.
5. Press down arrow to switch the screen, press Energy Saver.
6. Select appropriate option and time.

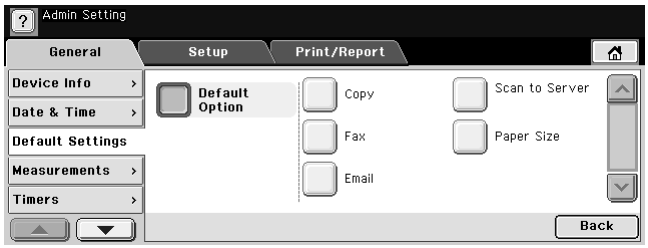


7. Press OK.

4.4.2.7 Changing the default settings

You can set the default values for copy, fax, email, scan and paper all at once.

1. Press Machine Setup on the control panel.
2. Press Admin Setting.
3. Login message appears, enter password with number keypad and press OK.
4. Press General tab > Default Settings > Default Option.
5. Press the function you want to change, and change its settings.

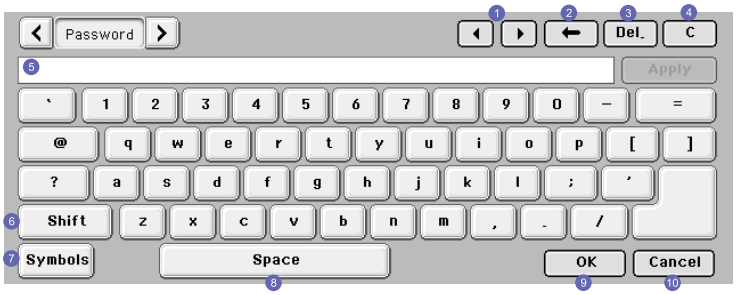


For example, if you want to change the default setting of the brightness & darkness for a copy job, press Copy > Darkness and adjust the brightness & darkness.

6. Press OK.

4.4.2.8 Understanding the keyboard

You can enter alphabet characters, numbers, or special symbols using the keyboard on the touch screen. This keyboard is specially arranged like a normal keyboard for better usability for the user.
Touch the input area where you need to enter characters and the keyboard pops up on the screen. The keyboard below is the default showing the lowercase letters.



1	Left/Right: moves the cursor between characters in the input area.
2	Backspace: deletes the character on the right side of the cursor.
3	Delete: deletes the character on the left side of the cursor.
4	Clear: deletes all characters in the input area.
5	Input area: enter letters within this line.
6	Shift: converts lowercase keys to uppercase keys.
7	Symbol: switches from the alphanumeric keyboard to the symbol keyboard.

8	Space: enters a blank between characters.
9	Top domai n: chooses top level domains like .com, .net, .org, etc. By pressing arrow key, you can select different domains. You can set the 5 different top level domains in Admin settings.
10	OK: saves and closes input result.
11	Cancel: cancels and closes input result.

Note: *If you enter the email address, then the keyboard for email pops up. After you enter the address, press OK to activate entered address. Press the arrow key on the side for rotating between From, To, CC, Bcc, Subject, Message in order.*

4.5 Service Mode

4.5.1 Introduction

This document will capture the behavior specifications for the GUI Windows for Diagnostics

Each section of this document describes one feature with a step window image and script.
However, used window image is not fixed image from the specification point of view. Acquire detail information from script. Window image is just example image will be implemented.

This is intended to aid GUI designers, reviewers & also testers.

Associated Documents:

<The documents that are associated with this should be mentioned here. For example in case of Basic Copy, the following could be the associated documents>

4.5.2 Entry Point

The entry for Diagnostics is the combination of hard key.
User should press “xxx” and “yyy” altogether.

After pressing the hard button for entry, OP displays Login window.
Login window has editbox for Passcode input.
Passcode has 4 digits.
Passcode is 1934
After input the passcode and OK button, OP shall wait until get the response from MCB notifying that MCB is idle.
Once Diagnostics window is displayed, all hard buttons except numeric button and ‘clear’ button shall be disabled.

Below is the main window of Diagnostics.

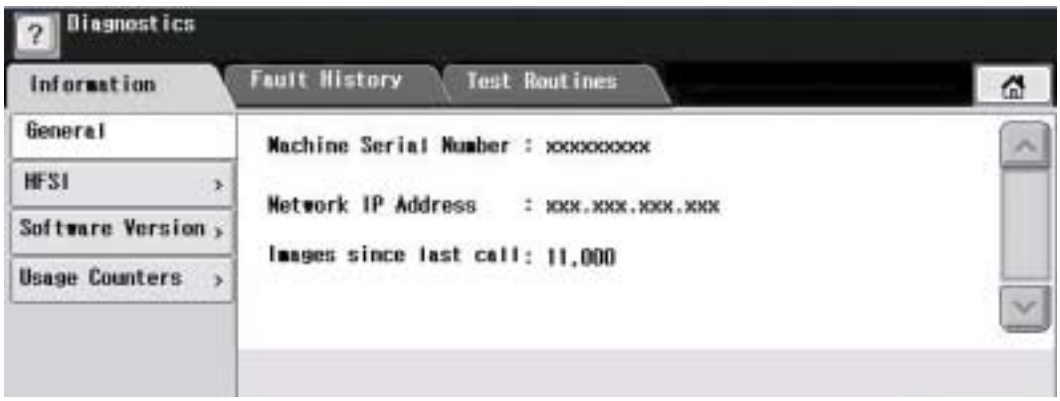


Figure 2-1 Diagnostics Main window

There are 3 tabs. They are “Information”, “Fault History”, and “Test Routines”.
Each tab has several sub items and they’re listed as below.

Contents

- Information
  A. General
  B. HFSI
  C. Software Version
  D. Usage Counters
- Fault History
  A. Fault Log
  B. Fault Counters
- Test Routines
  A. Copier
  B. Fax
  C. Network
  D. Other

Detail of each tab and items will be explained in the following chapters.

4.5.2.1 Logout

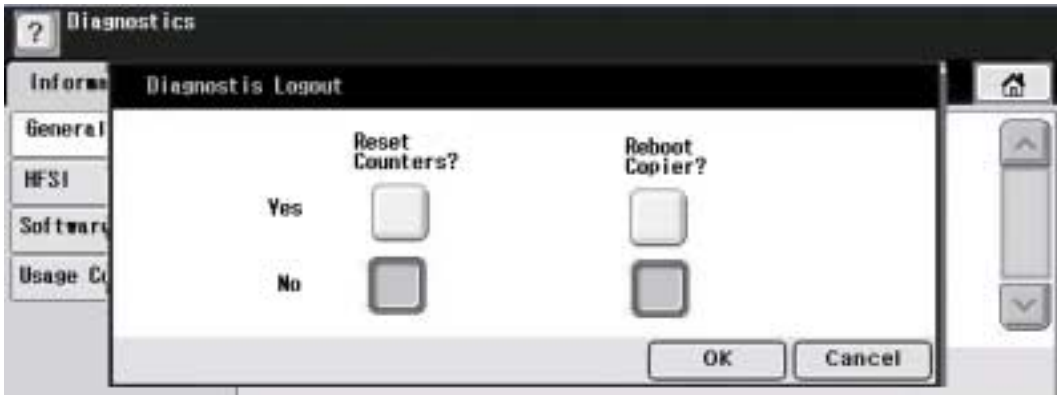


Figure 2-2 General item window

By pressing the Home button, exit Diagnostics mode.
When exit Diagnostics mode, a popup window shall display.
By default, Reset Counters is No, Reboot Copier is Yes.

4.5.3 Information Tab

Flowchart
N/A

Information Tab provides detail information of the machine.

4.5.3.1 General

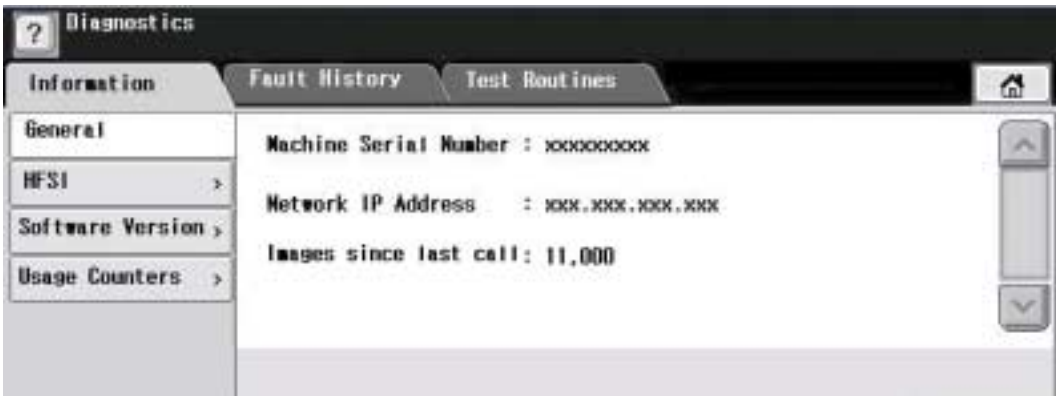


Figure 3-1 General item window

When user selects General, OP displays Machine Serial Number, Network IP Address and Images since last call.

4.5.3.2 HFSI

HFSI shows the usage of “High Frequency Service Items”.

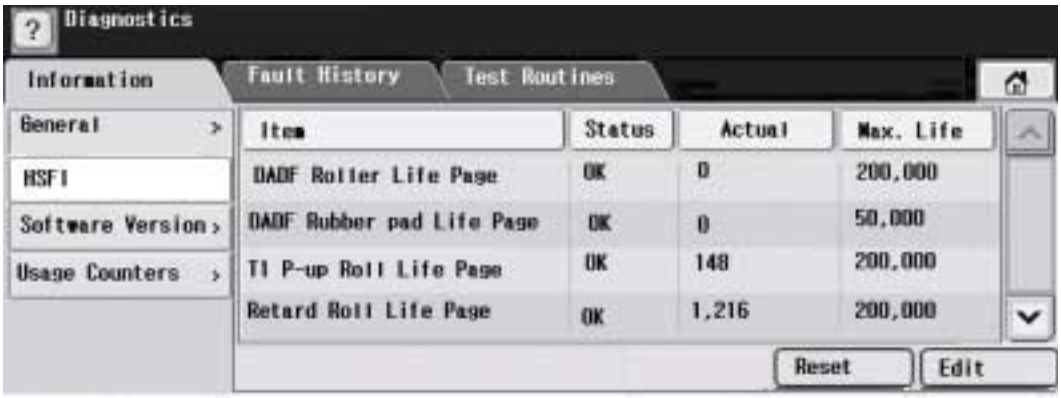


Figure 3-2 HFSI item window

When user select “HFSI”, OP displays the list of HFSI read from the MCB.
In the list, there are “Item”, “Status”, “Actual”, and “Max. Life”.

- User Behavior
  User can select one item in the list to reset the counter using "Reset" button or to edit the Max.Life and threshold value using "Edit" button.

- Items in this column are:
  DADF Roller Life Page
  DADF Rubber Pad Life Page
  T1 P-up Roll Life Page
  Retard Roll Life Page
  T2 P-up Roll Life Page
  T3 P-up Roll Life Page
  T4 P-up Roll Life Page
  Bypass Rubber Pad Life page
  Transfer Roll Life Page
  Fuser Roll Life Page
  Fuser Unit Life page
  Heat Roll Life Page
  Pressure Roll Life Page

- Status
  The possible values in this column are 'OK', 'Check', 'Negative' and 'Off .

  OK : Actual counter is smaller than the threshold value
  Check : Actual counter is bigger than threshold value but smaller than Max.Life
  Off : Actual counter exceeds Max.Life
  Negative : There is no counter to display. In this case, it shall display '-' in the Status and Max Life column.

- Actual
  Values in this column are actual counts for HFSI usage
  Values in this column shall use delimiter(,) every 1000 unit

- Max. Life
  Values in this column are maximum life limits set for HFSI.

There are 3 buttons titled "Reset" and "Edit".

- Reset
  This button is used to reset the actual counter after replacing the HFSI unit.
  This button is disabled before user select one item in the list and enabled once user select any of the items in the list.
  Once user presses, a confirmation window shall display to user confirm again. The window is displayed as below.
  If user confirms reset, it will reset the counter to 0.
  If the counter of selected item is 0, 'Reset' button shall be disabled.
  If user selects 'OK' or 'Cancel' button, a confirmation window shall return to the previous window and display pressed 'HFSI' tab

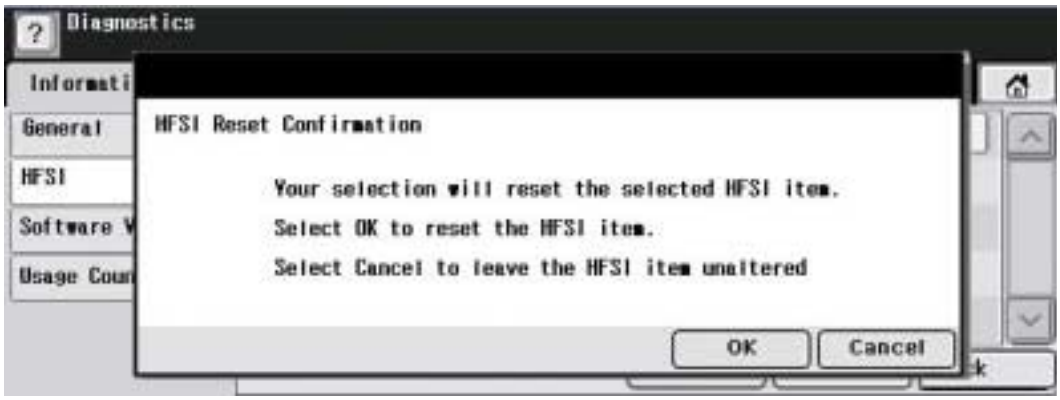


Figure 3-3 HFSI item Reset window

- Edit
  "Edit" button is disabled until user selects one item in the list.
  Selecting "Edit" button causes edit window to be displayed.
  There are two input filed for 'Maximum Life' and for 'Threshold'.

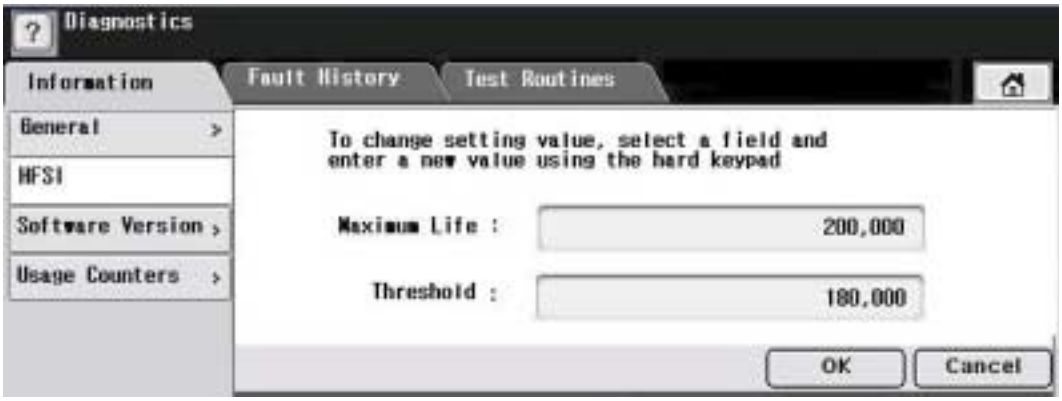


Figure 3-4 HFSI item Edit window

By default the Threshold data field is displayed as selected.
Each data filed shall display default value or the last-saved value entered by the service engineer.
The data field shall support the numeric characters of 0 to 9
The hard keypad characters of '#', 'phone' and '*' are not supported and shall generate an invalid entry message if selected.
The hard keypad characters of 'c' shall delete all characters displayed within the selected data filed.
By selecting 'Cancel', window moves back to HFSI window without saving user's setting.
By selecting 'OK' button, window moves back to HFSI window saving user's setting
Threshold value shall not be greater than Maximum Life.

4.5.3.3 Software Version

Figure 3-4 Software Version item window

- Items in this column are:
  - Main Controller
  - Image Output Terminal
  - User Interface
  - Network Controller
  - Document Feeder
  - Tray 2 Firmware
  - Tray 3 Firmware
  - Tray 4 Firmware

The items in the Software Version shall be same as those of Machine Status > Machine Infor > Machine Details > Software Version.

4.5.3.4 Usage Counters

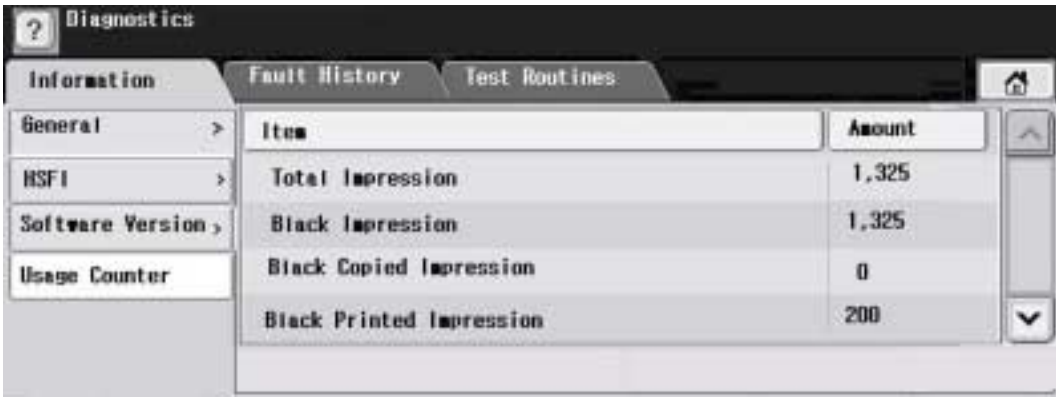


Figure 3-5 Usage Counter item window

- Items in this column are:
  Total Impressions
  Black Impressions
  Black Copied Impressions
  Black Printed Impressions
  Sheets
  Copied Sheets
  Black Copied Sheets
  Printed Sheets
  Black Printed Sheets
  2 Sided Sheets
  Copied 2 Sided Sheets
  Black Copied 2 Sided Sheets
  Printed 2 Sided Sheets
  Black Printed 2 Sided Sheets
  Fax Images Received
  Images Sent
  Server Fax Images Sent
  Network Scanning Images Sent
  Email Images Sent
  Maintenance Impressions
  Black Maintenance Impressions
  Known Jams in the IOT
  Known Jams in Finishing Device(s)
  Attempted Sheet Feeds from Internal trays
  Actual sheet feeds from Internal trays
  Normal Level Power On Hours
  Power Save Hours
  Attempted Original Sheet Feeds in the DADF

The items in the Usage Counter shall be same as those in the Machine Status > Machine Infor > Billing Counters.

4.5.4 Fault History Tab

4.5.4.1 Fault Log

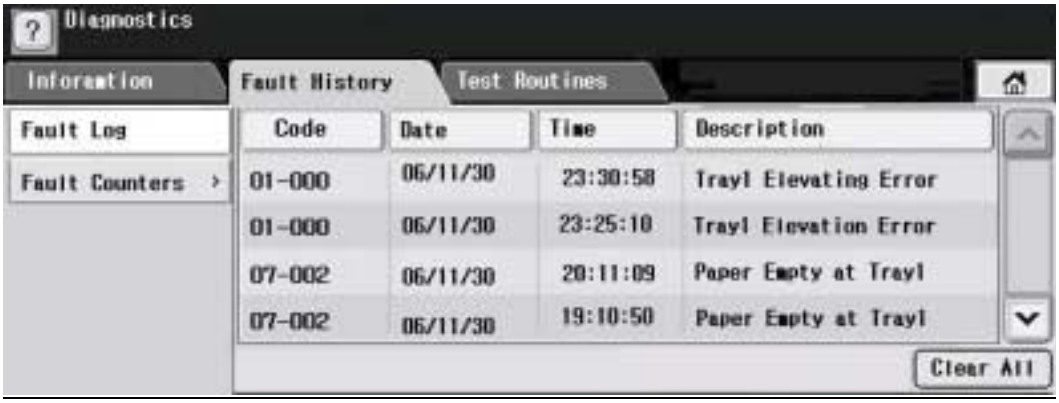


Figure 4-1 Fault Log item window

Fault log window shall display errors last error first.

Diagnostics
The Fault Log history will be cleard.
Touch OK to delete the history or touch Cancel
to return to the fault Log window
OK
Cancel

Figure 4-2 Fault Log item Clear All window

Once user confirms to clear Fault Log, the list shall be empty.

4.5.4.2 Fault Counters

Figure 4-3 Fault Counters window

Fault Counters window displays Fault group with number and name.
They are

- 01 Feeder
- 02 Fuser
- 03 Motor Fan
- 04 LSU
- 05 Option Interface
- 06 CRU
- 07 Finisher
- 08 DADF
- 09 FDI
- 10 Controller
- 11 Scanner
- 12 Mismatch Type
- 13 Network
- 14 Cloning
- 18 ax Memory State
- 21 Tray
- 24 MSOK

User shall select one item in the list at a time and multiple selection shall not be supported.
User can select 'Non Zero' or 'All'
By default, 'Non Zero' shall be selected..
When press 'OK', Fault Counters Detail Window (Figure 4-4) shall be displayed.

Figure 4-4 Fault Counters Detail window

Fault Counters Detail window shall display Fault code, description and value (counter) among the selected Fault Group.
Items of displayed Fault codes are different based on the selection of 'Non Zero' or 'All' When selected 'Non Zero', Fault codes in the selected Fault Group having non zero counter shall be displayed When selected 'All', all Fault codes in the selected Fault Group shall be displayed.
Display order of Fault code is upward.

4.5.5 Test Routines Tab

4.5.5.1 Copier

4.5.5.1.1 NVM Read/Write

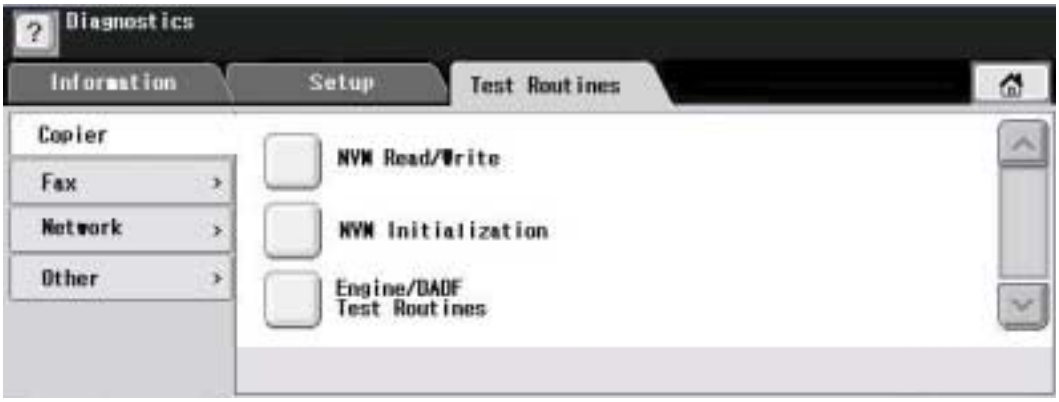


Figure 5-1 Copier item window

When press Engine/DADF Test Routines, OP shall send test mode entry command.
(CMD_COPY_COMP_ENTERMODE)
Only when the response for CMD_COPY_COMP_ENTERMODE is OK, user can move into Engine/DADF Test Routines.

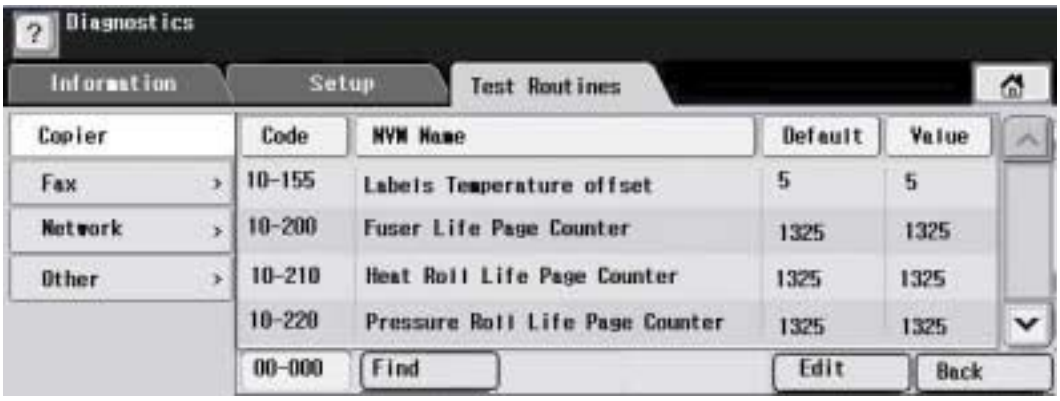


Figure 5-2 Copier item NVM Read/Write window

- Items in this column are:
  - 10 - 100 StandBy Temperature offset
  - 10 - 105 Run Temperature offset
  - 10 - 110 Low Power Temperature offset
  - 10 - 115 101-185 mm Temperature offset
  - 10 - 120 186-216 mm Temperature offset
  - 10 - 125 60 gms Temperature offset
  - 10 - 130 90 gms Temperature offset
  - 10 - 135 Bond Temperature offset
  - 10 - 140 Transparency Temperature offset
  - 10 - 145 Cardstock Temperature offset
  - 10 - 150 Envelopes Temperature offset
  - 10 - 155 Labels Temperature offset
  - 10 - 200 Fuser Life Page Counter

10 - 210 Heat Roll Life Page Counter
10 - 220 Pressure Roll Life Page Counter
10 - 300 Pick-up interval delay
10 - 310 Pick-up interval delay [Special paper]
07 - 100 Top Registration Tray1 Simplex
07 - 200 Top Registration Tray2 Simplex
07 - 300 Top Registration Tray3 Simplex
07 - 400 Top Registration Tray4 Simplex
07 - 500 Top Registration Bypass Simplex
07 - 110 Side Registration Tray1 Simplex
07 - 210 Side Registration Tray2 Simplex
07 - 310 Side Registration Tray3 Simplex
07 - 410 Side Registration Tray4 Simplex
07 - 510 Side Registration Bypass Simplex
07 - 120 Top Registration Tray1 Dup_long (2nd side)
07 - 220 Top Registration Tray2 Dup_long (2nd side)
07 - 320 Top Registration Tray3 Dup_long (2nd side)
07 - 420 Top Registration Tray4 Dup_long (2nd side)
07 - 520 Top Registration Bypass Dup_long (2nd side)
07 - 130 Side Registration Tray1 Dup_long (2nd side)
07 - 230 Side Registration Tray2 Dup_long (2nd side)
07 - 330 Side Registration Tray3 Dup_long (2nd side)
07 - 430 Side Registration Tray4 Dup_long (2nd side)
07 - 530 Side Registration Bypass Dup_long (2nd side)
07 - 140 Top Registration Tray1 Duplex (1st side)
07 - 240 Top Registration Tray2 Duplex (1st side)
07 - 340 Top Registration Tray3 Duplex (1st side)
07 - 440 Top Registration Tray4 Duplex (1st side)
07 - 540 Top Registration Bypass Duplex (1st side)
07 - 150 Side Registration Tray1 Duplex (1st side)
07 - 250 Side Registration Tray2 Duplex (1st side)
07 - 350 Side Registration Tray3 Duplex (1st side)
07 - 450 Side Registration Tray4 Duplex (1st side)
07 - 550 Side Registration Bypass Duplex (1st side)
06 - 100 Vertical Magnification
06 - 110 Horizontal Magnification
08 - 100 Pick up roller Life Page Counter
08 - 110 Forward roller Life Page Counter
08 - 120 Retard roller Life Page Counter
08 - 130 Tray2 Pick-up Roller Life Page Counter
08 - 140 Tray3 Pick-up Roller Life Page Counter
08 - 150 Tray4 Pick-up Roller Life Page Counter
08 - 160 Bypass Rubber Pad Life Page Counter
09 - 100 LD Light Level
09 - 110 MHV Control Bias Control
09 - 120 THV Control Bias Control
09 - 130 Deve Bias Control
09 - 200 Drum Life Page Counter
09 - 210 Toner Cartridge Life Page Counter
09 - 240 Drum PWM
09 - 140 Detack Bias Control
09 - 230 Transfer Roller Life Page Counter
05 - 700 ADF Roller Life Page Counter
05 - 710 ADF Rubber Pad Life Page Counter

Edit button shall be disabled until any NVM item is selected.
Edit button shall be disabled when read only NVM is selected.
Search edit box has 00-000 as a default. User shall input the whole number to find a specific NVM by pressing Find button.
If matching NVM is found, the page including the specified NVM shall be displayed and the NVM is shown as selected.
If matching NVM is not found, error message such as "Invalid NVM number" shall be displayed on the status area and search edit box displays default number.

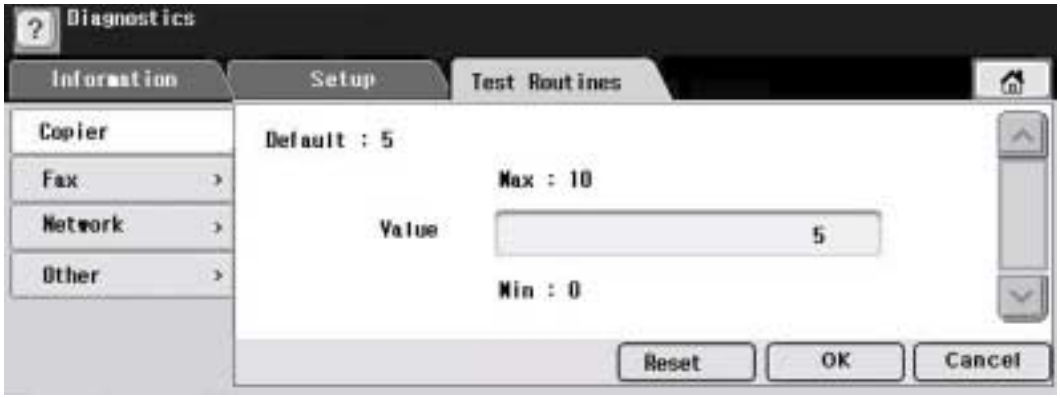


Figure 5-3 Copier item NVM Read/Write Edit window

When press Reset, value shall be Default value without confirmation popup window.
NVM name shall be displayed top of Default value string.
When press OK, confirmation popup window shall displayed.
Confirmation window shall display "Touch OK to save the value or Cancel to return"

4.5.5.1.2 NVM Initialization

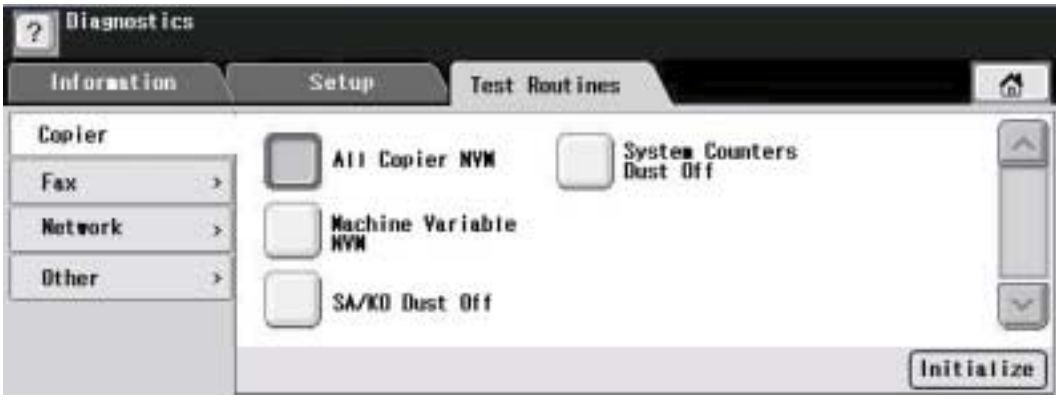


Figure 5-4 Copier item NVM Initialization window

By default, none of items is selected and Initialize button shall be disabled.
There shall be Back button.
When Back button is pressed, NVM Initialization window return the previous window and NVM Initialization button shall be changed to the normal image

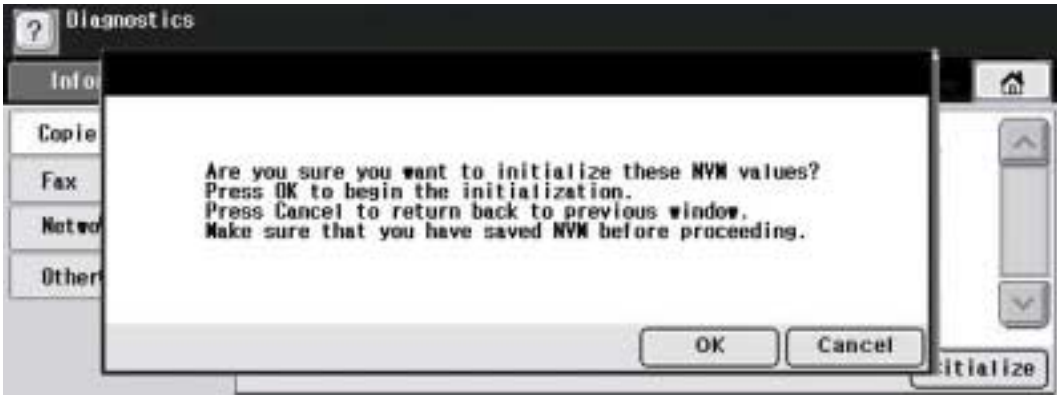

Diagnostics
Are you sure you want to initialize these NVM values?
Press OK to begin the initialization.
Press Cancel to return back to previous window.
Make sure that you have saved NVM before proceeding.
OK
Cancel

Figure 5-5 Copier item NVM Initialization Confirmation window

When OK/Cancel is selected, move back to Figure 5-4.
When press OK button, OK and Cancel button are disabled until get the result from MCB.
When press OK button, SR shall show the initialization progress status and result.
When the result is get, pop up window shall be disappeared.
When press Cancel button, return to the previous window

4.5.5.1.3 Engine/DADF Test Routines

Figure 5-6 Copier item Engine/DADF Test Routines Find Component window

When exit this window, OP shall send exit command.
(CMD_COPY_COMP_EXITMODE)
By default, all Test routines will be displayed.
By default, search edit box has 00 .
OK/Reset button shall be disabled until any test routine is selected.
Maximum number of selection is 3.
Reset will deselect all selected test routines.
User select test routine by touching the row and deselect touching it again.
User input chain number in search edit box and only all test routines in the chain shall be displayed.

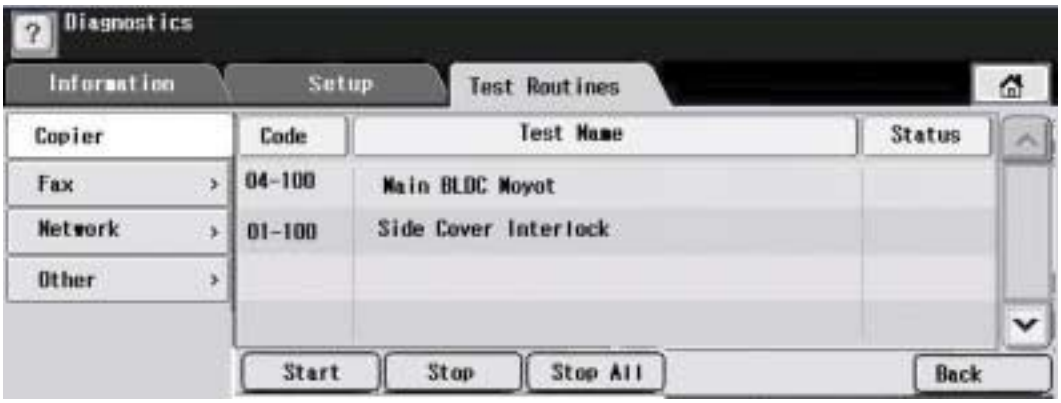


Figure 5-7 Copier item Engine/DADF Test Routines window

By default, Start/Stop/Stop All shall be disabled.
Start button shall be enabled when selected item is not running.
Multiple selection shall not be supported.
Stop shall be enabled only when the selected item is running.
Stop All shall be enabled when there is any running test item.
Back button shall be disabled when there is any running test item.

4.5.5.2 Fax

Figure 5-8 Fax item window

4.5.5.2.1 NVM Read/Write

Figure 5-9 Fax item NVM Read/Write window

For the behavior, refer to 4.5.5.1.1

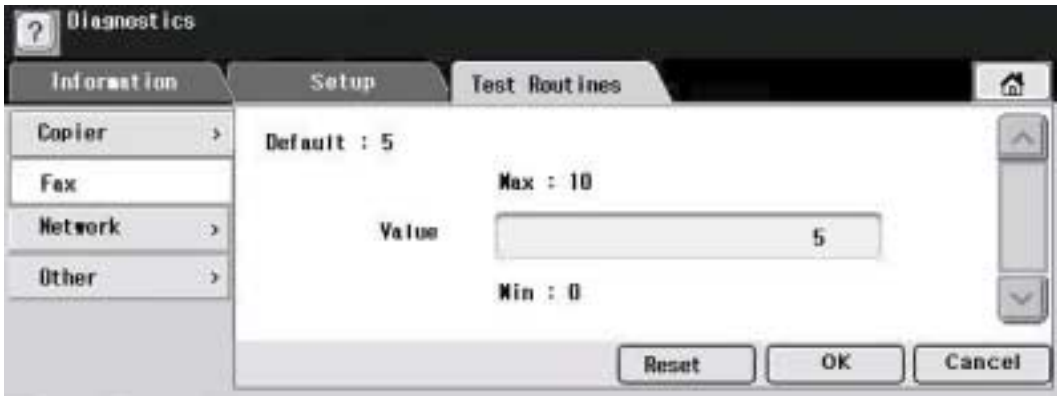


Figure 5-10 Fax item NVM Read/Write Edit window

For the behavior, refer to 4.5.5.1.1

4.5.5.2.2 NVM Initialize

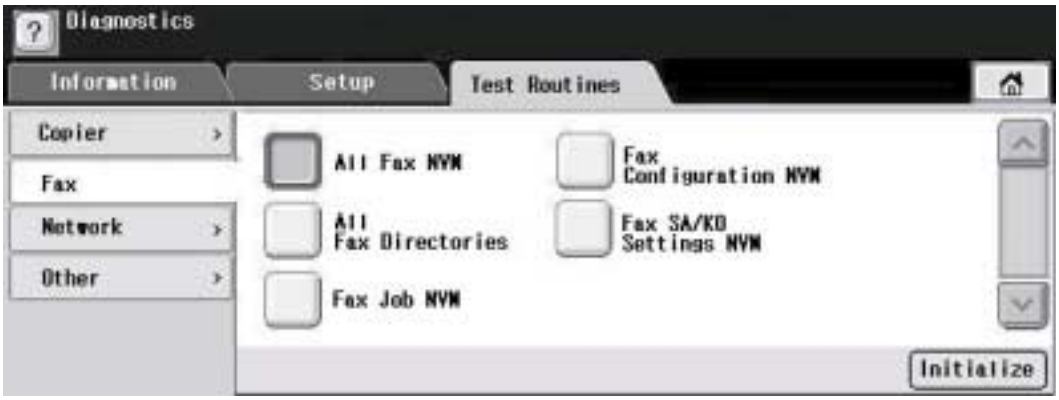


Figure 5-11 Fax item NVM Initialize Edit window

For the behavior, refer to 4.5.5.1.2.

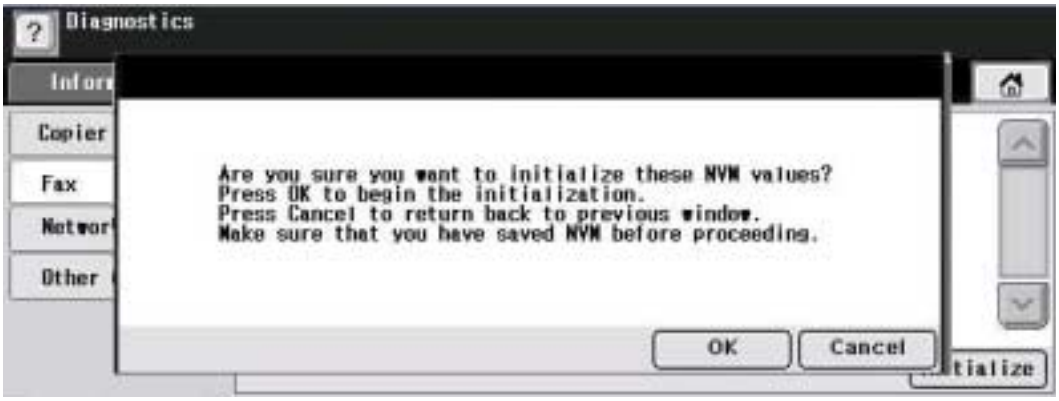


Figure 5-12 Fax item NVM Initialize Confirmation window

For the behavior, refer to 4.5.5.1.2.

4.5.5.2.3 Protocol Report

Figure 5-13 Fax item Protocol Report window

By pressing the Print, starts printing.

4.5.5.2.4 Fax Routines

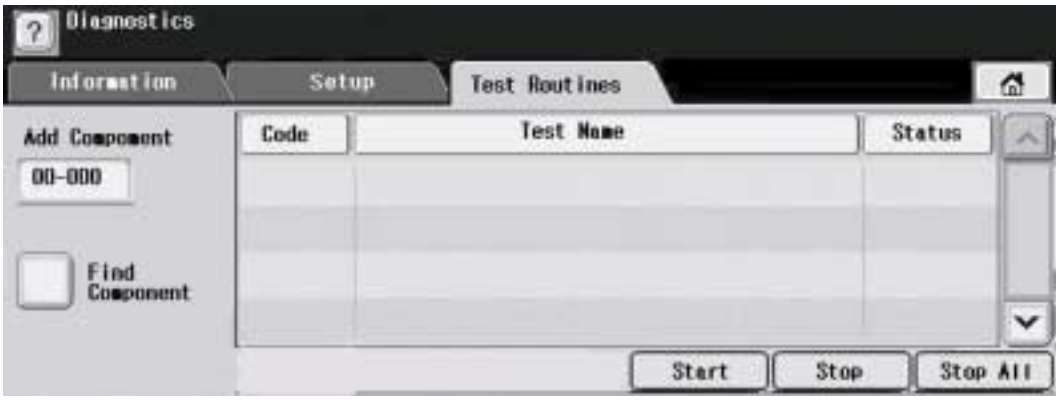


Figure 5-14 Fax item Fax Routines window

For the behavior, refer to 4.5.5.1.3

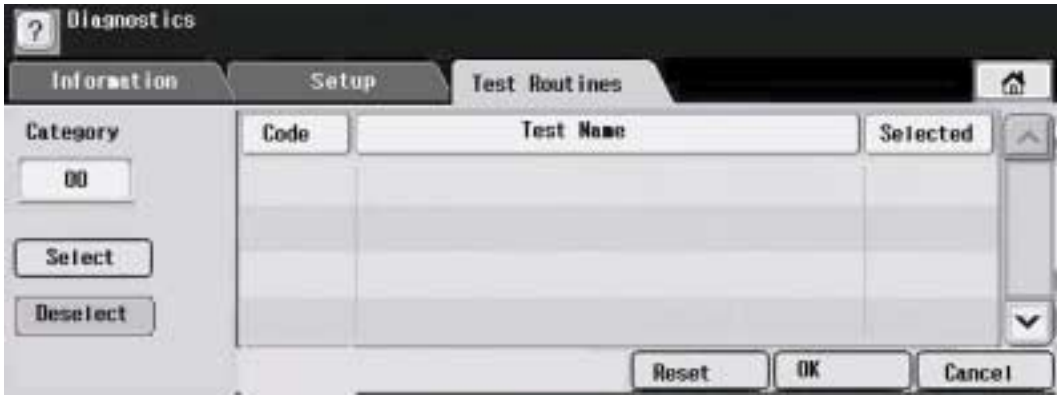


Figure 5-15 Fax item Fax Routines Find window

For the behavior, refer to 4.5.5.1.3

4.5.5.3 Network

Figure 5-16 Network item window

4.5.5.3.1 NVM Initialization

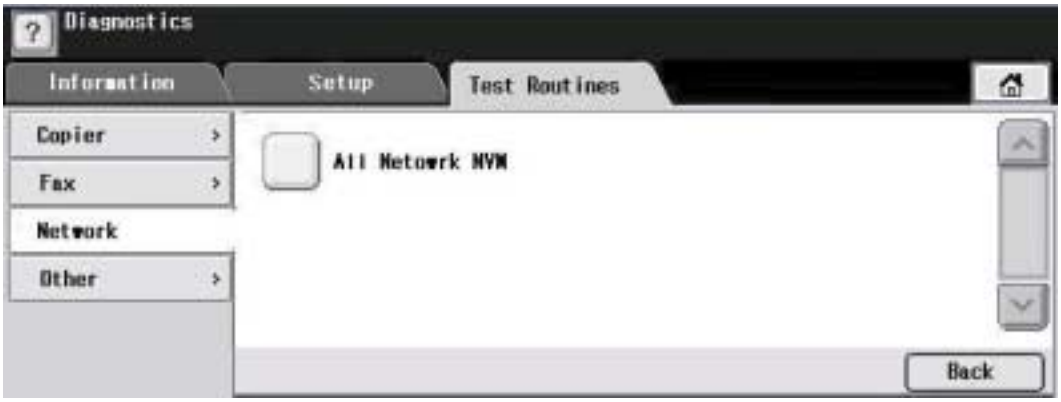


Figure 5-16 Network item NVM Initialization window

For behavior, refer to 4.5.5.1.2

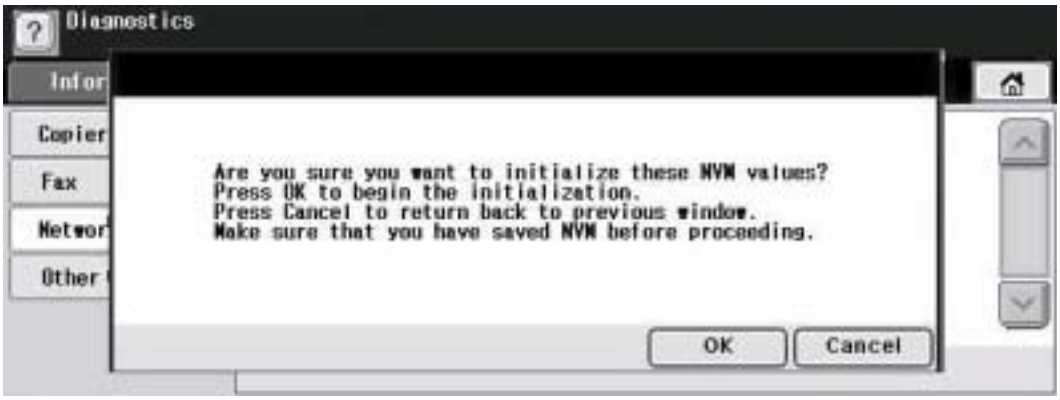

Diagnostics
Copier
Fax
Are you sure you want to initialize these NVM values?
Press OK to begin the initialization.
Press Cancel to return back to previous window.
Make sure that you have saved NVM before proceeding.
OK
Cancel

Figure 5-17 Network item NVM Initialization Confirmation window

4.5.5.4 Other

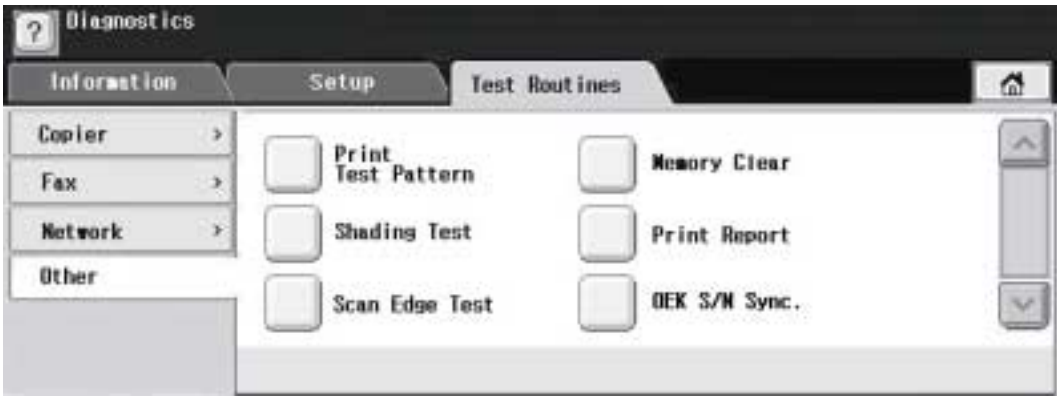


Figure 5-18 Other item window

4.5.5.4.1 Print Pattern

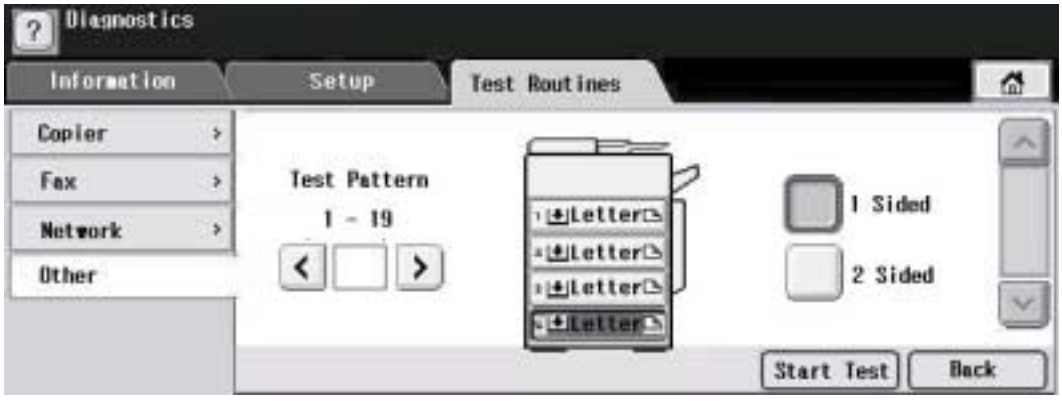


Figure 5-19 Other item Print Pattern window

For printing Test Pattern, use Report Print Command.
By default, Test Pattern number shall be 1.
User shall select paper source by selecting tray of the image.
User shall select simplex/duplex printing option by selecting 1 sided /2 sided button.

4.5.5.4.2 Shading Test

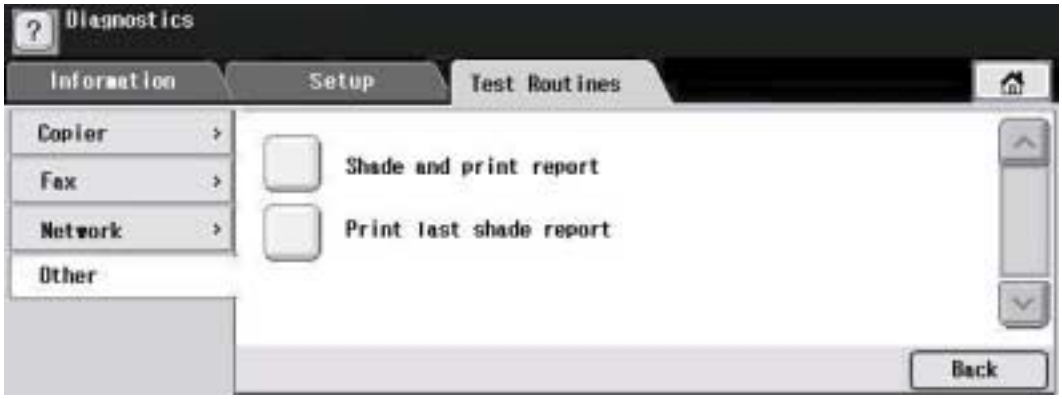


Figure 5-20 Other item Shading Test window

4.5.5.4.3 Scan Edge Test

Figure 5-21Other item Scan Edge Test window

4.5.5.4.4 Memory Clear

Figure 5-22Other item Memory Clear window

4.5.5.4.5 Print Report

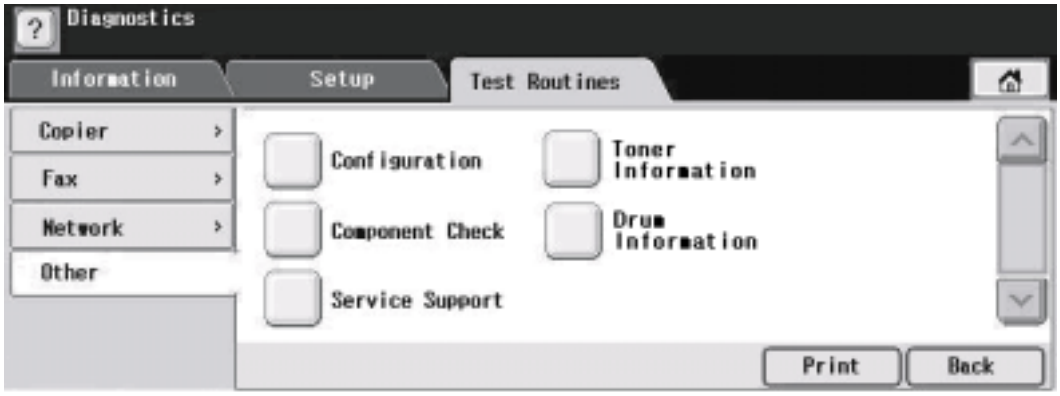


Figure 5-23Other item Print Report window

4.5.5.4.6 OEK S/N Sync.

Figure 5-24 OEK S/N Sync. window

4.5.6 Firmware Upgrade

4.5.6.1 Port 9100 Download (Machine and User PC should be connected to network)

1) Copy ipsend.exe and firmware file to local folder.

2) Execute dos prompt at same location as above

3) Type “ipsend.exe [ip address] [firmware file name]” and Press Enter

4.5.6.2 SWS

1) Open Internet Explorer

2) Type ip address of machine at the address bar, and press enter

3) Go to maintenance, Select firmware file by browse button

4) Press Upgrade button

4.5.6.3 Local USB Download

1) Copy usblist2.exe and firmware file to local folder.

2) Execute dos prompt at same location as above

3) Type “usblist2.exe[firmware file name]” and Press Enter

4.6 Consumables and Replacement Parts

4.6.1 Maintenance part

To avoid print quality and paper feed problems resulting from worn parts and to maintain your printer in top working condition the following item swill need to be replaced at the specified number of pages or when the life span of each item has expired.

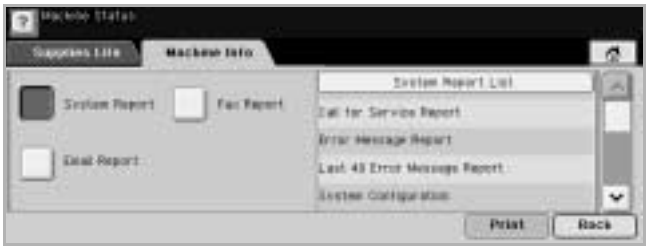
Items	Yield (Average)
DADF rubber pad	Approx. 50,000 pages
Multi-purpose tray rubber pad	Approx. 200,000 pages
DADF feed roller	Approx. 50,000 pages
Multi-purpose tray feed roller	Approx. 200,000 pages
Transfer roller	Approx. 100,000 pages
Fuser unit	Approx. 200,000 pages
Paper Feed roller	Approx. 200,000 pages

We highly recommend that an authorized service provider, dealer or the retailer where you bought printer performs this maintenance activity.

4.6.2 Printing machine's report

You can print the machine's information and job report.

1. Press Machine Setup on the control panel.
2. Press Machine Status > Machine Info. tab > Print/Report.
3. Select the report type, then the right side of the screen shows the list to print.
4. Select the list to print.



5. Press Print.

   Note : You can use SynchThru Web Service to print the machine's configuration or browse the status. Open the internet browser in the networked computer, and type the machine's IP address. When SynchThru Web Service is opened, click Information > Print information.

4.6.3 Clearing memory

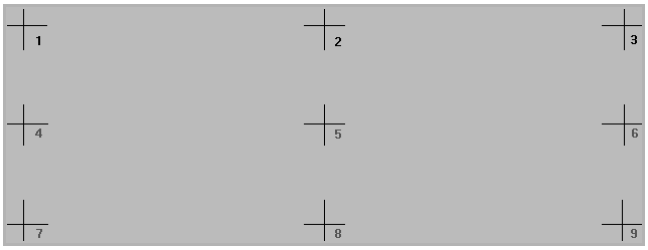
When you want to delete all the data, including data from mail box, received fax, or user settings, in the flash memory of the machine, use the memory clearing function.

※ This function(Clearing memory) of the SCX-6345N is not supported

4.6.4 Calibrating the touch screen

When pointing positions of the touch screen is incorrect, you can correct the pointing position using the calibration feature.

1. Press and hold the numeric key 0. While you are pressing the key 0, turn on the machine to enter the calibration mode.
2. When the machine enters to the calibration mode, press + mark in numerical order.
3. When the screen shows the job done, press any number key on the control panel to validate the touch screen.
4. When the calibration screen shows up again, press + mark in numerical order.
5. When the machine completes the calibration, turn off and on the machine again.



4.6.5 Checking the supplies life

If you want to know the supplies' life within the machine, follow the next step.

1. Press Machine Setup on the control panel.
2. Press Machine Status.
3. Press down arrow to browse all the supply list, measurement, and remains.

4.6.6 Checking the machine's serial number

If you want to check your machine's serial number from the screen, follow the next step.

1. Press Machine Setup on the control panel.
2. Press Machine Status > Machine Info. tab > Machine Details.

4.6.7 Clearing the toner empty message

When you want to set the machine not to show the toner empty and replace the toner message, follow the next steps.

1. Press Machine Setup on the control panel.
2. Press Admin Setting. When the login message pops up, then enter password and press OK.
3. Press General > Ignore Toner Empty Status.
4. Press On.
5. Press OK.

4.6.8 Cleaning your machine

To maintain print and scan quality, follow the cleaning procedures below each time the toner cartridge is replaced or if print and scan quality problems occur.

Caution : Cleaning the machine cabinet with cleaning materials that contain large amounts of alcohol, solvent, or other strong substances can discolor or damage the cabinet.

4.6.8.1 Cleaning the outside

Clean the machine cabinet with a soft lint-free cloth. You can dampen the cloth slightly with water, but be careful not to let any water drip onto or into the machine.

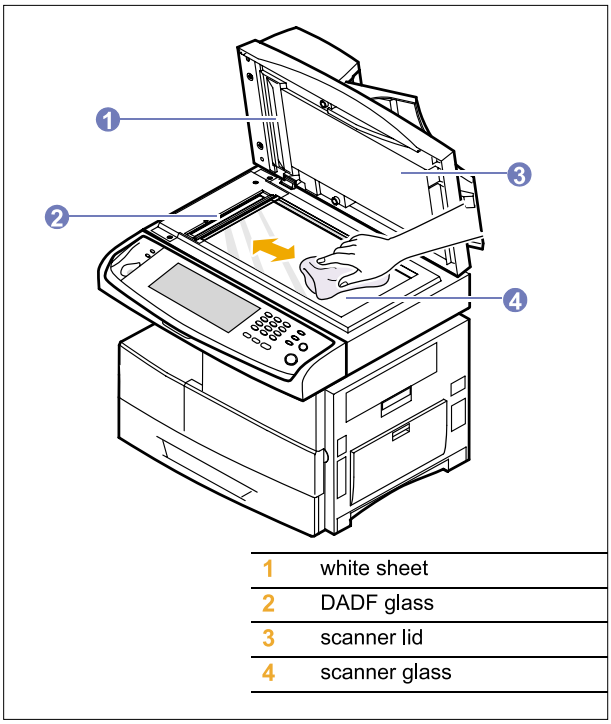
4.6.8.2 Cleaning the inside

Contact a service representative to clean the inside of the machine.

4.6.8.3 Cleaning the scan unit

Keeping the scan unit clean helps ensure the best possible copies. We suggest that you clean the scan unit at the start of each day and during the day, as needed.

1. Slightly dampen a soft lint-free cloth or paper towel with water.
2. Open the scanner lid.
3. Wipe the surface of the scanner glass and DADF glass until it is clean and dry.
4. Wipe the underside of the scanner lid and white sheet until it is clean and dry
5. Close the scanner lid



1	white sheet
2	DADF glass
3	scanner lid
4	scanner glass

4.6.9 Maintaining the toner cartridge

Toner cartridge storage

To get the most from the toner cartridge, keep the following guidelines in mind:

- Do not remove the toner cartridge from its package until ready for use.
- Do not refill the toner cartridge. The machine warranty does not cover damage caused by using a refilled cartridge.
- Store toner cartridges in the same environment as your machine.

Expected cartridge life

The toner cartridge yield depends on the amount of toner that print jobs require. Average yield for a new toner cartridge is 20,000 standard pages in accordance with ISO/IEC 19752 standard. (Average yield for the original toner cartridge supplied with the machine is 20,000 standard pages.) The actual number may also be different depending on the print density of the pages you print on, and the number of pages may be affected by operating environment, printing interval, media type, and media size. If you print a lot of graphics, you may need to change the cartridge more often.

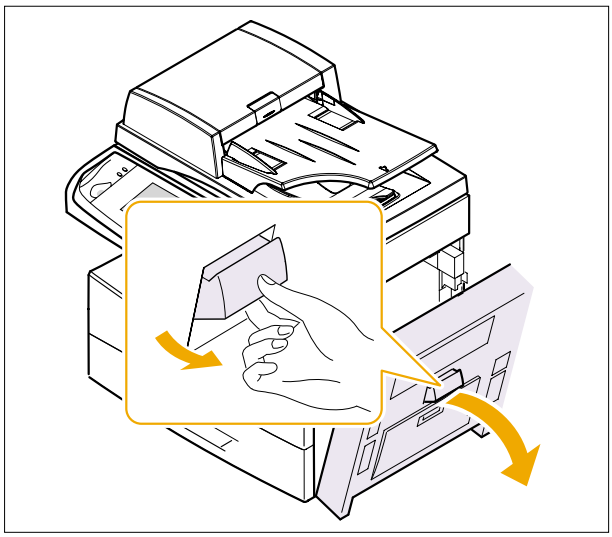
4.6.9.1 Replacing the toner cartridge

When the toner cartridge is completely empty:

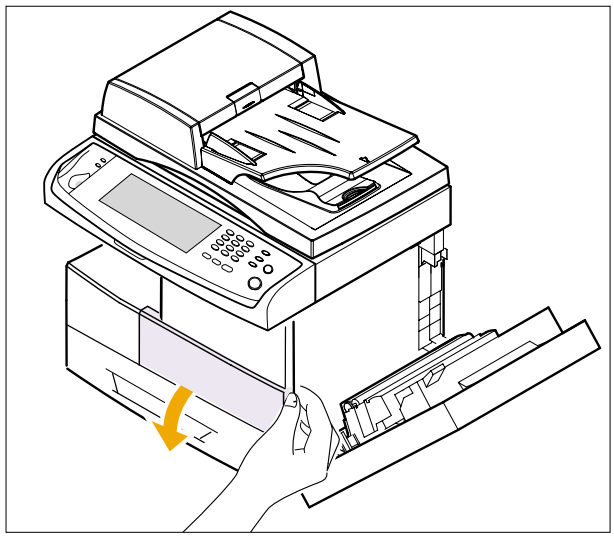
- Toner Empty appears on the display.
- The Status LED lights red.
- The machine stops printing. The incoming faxes are saved in memory.

At this stage, the toner cartridge needs to be replaced. For order information for toner cartridges.
Note : You can set the machine to disregard the Toner Empty message and to continue printing.

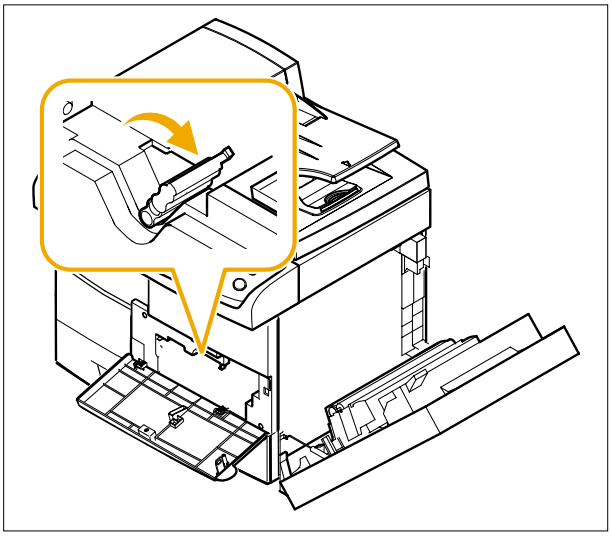
1. Open the side cover.



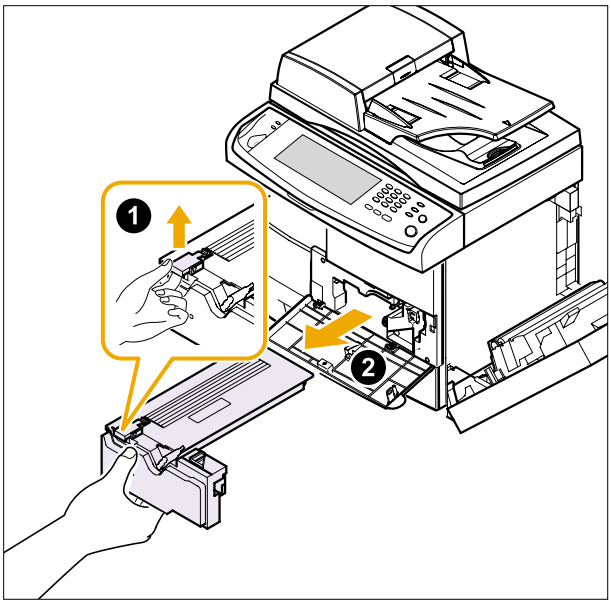
2. Open the front cover.



3. Turn the cartridge locking lever towards right until it sounds 'click', to release the toner cartridge.



4. Lift the locking lever and pull the toner cartridge out.

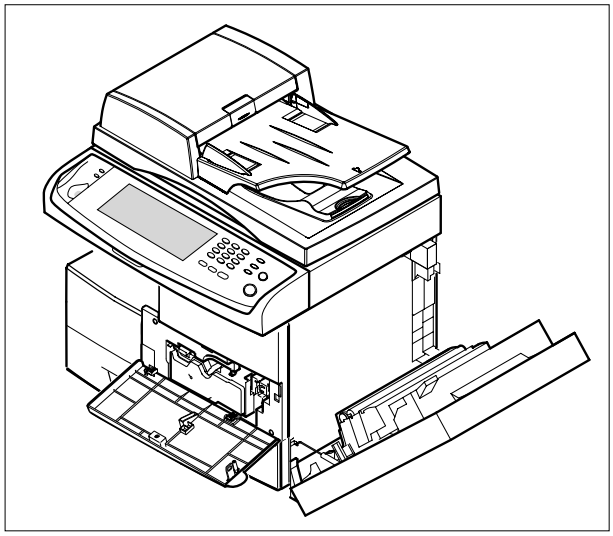


5. Remove the new toner cartridge from its bag.

6. Hold the toner cartridge by the handle and slowly insert the cartridge into the opening in the machine.

7. Slide the new toner cartridge in until it locks in place.

8. Turn the cartridge locking lever towards left until it sounds 'click'.



9. Close the front cover, then the side cover.

4.6.9.2 Replacing the drum cartridge

Expected cartridge life

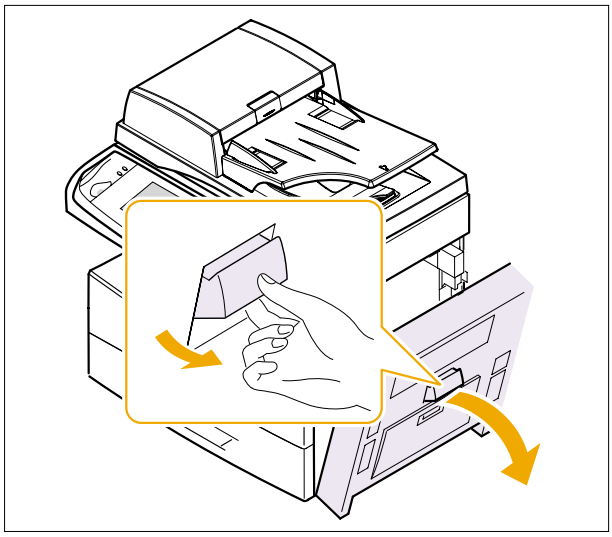
The useful life of the drum cartridge is approximately 60,000 copies. The LCD displays Drum Warning when the drum is near the end of life.

Approximately 6,000 more copies can be made, but you should have a replacement drum cartridge in stock.

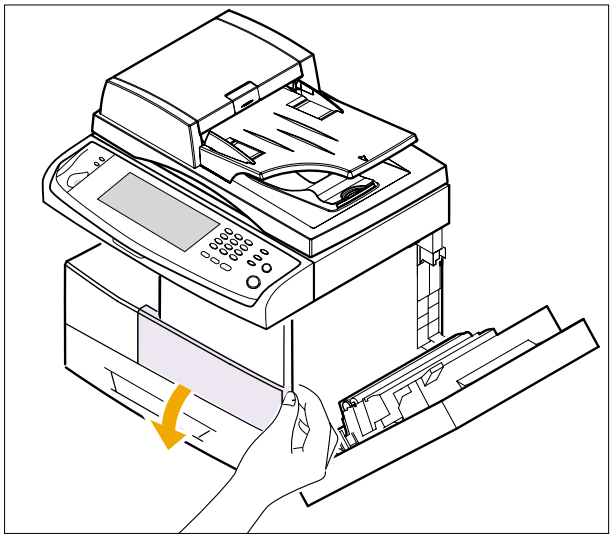
- Replace Drum appears on the display.
- The Status LED lights red.

For order information for drum cartridges.

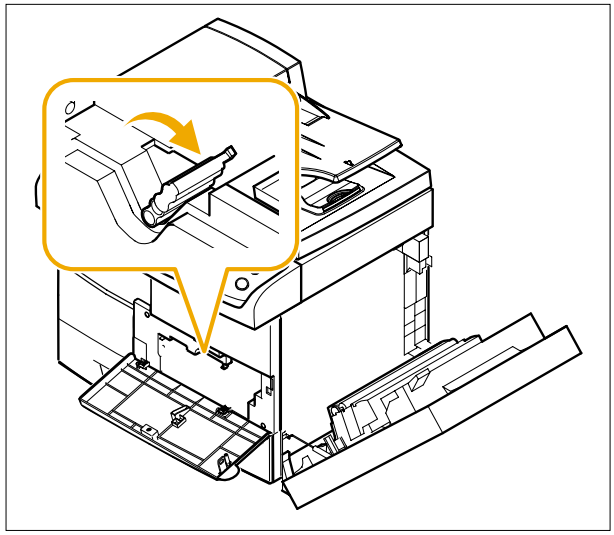
1. Open the side cover.



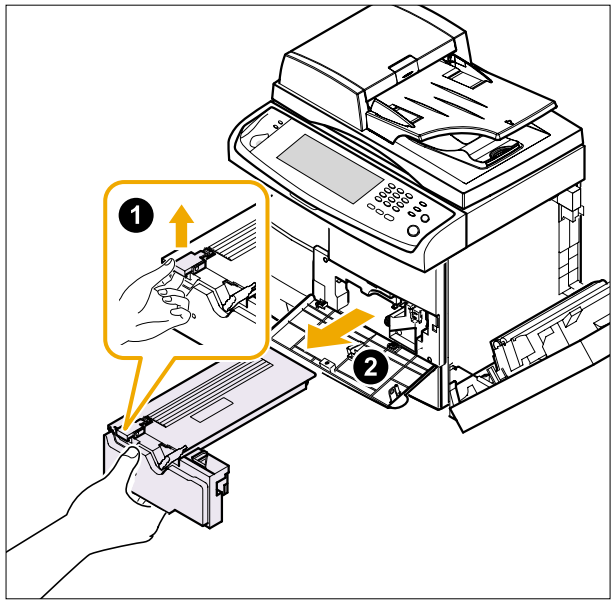
2. Open the front cover.



3. Turn the cartridge locking lever towards right until it sounds 'click', to release the toner cartridge.

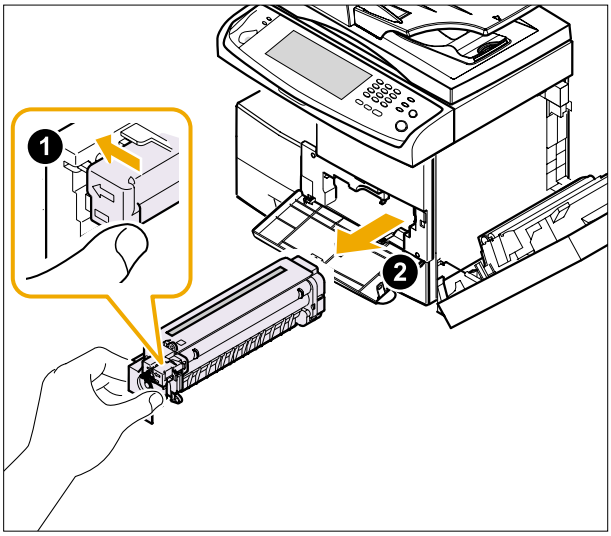


4. Lift the locking lever and pull the toner cartridge out.



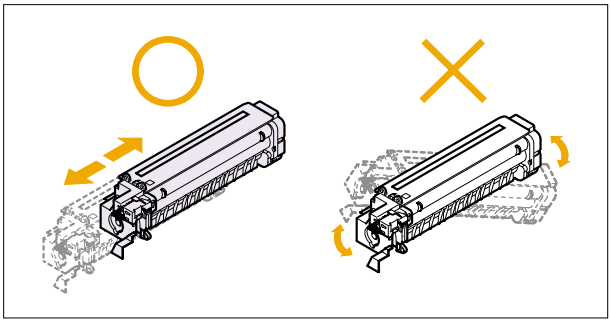
Note : The toner cartridge must be removed to replace the drum cartridge.

5. Pull the used drum cartridge out.

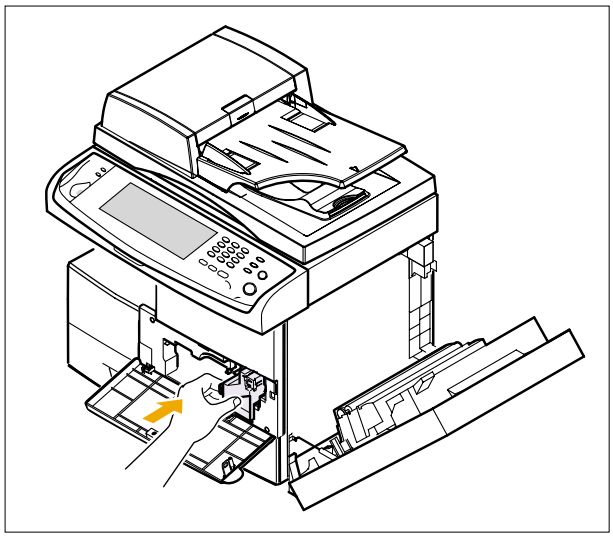


Note : Help the environment by recycling your used drum cartridge. Refer to the recycling brochure packed with the drum cartridge for details.

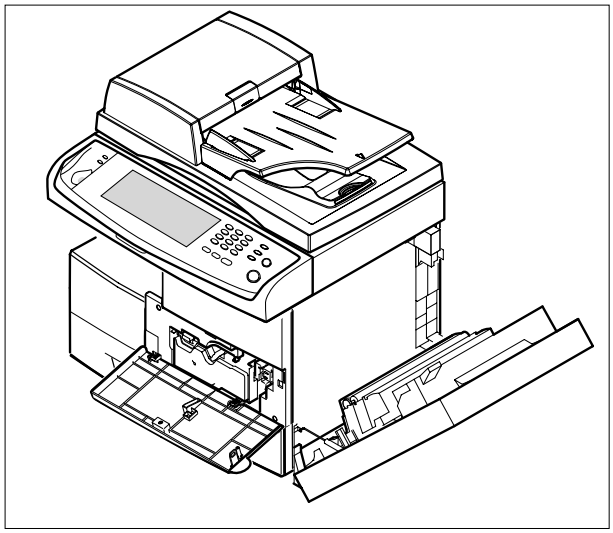
6. Thoroughly shake the drum cartridge side to side for five or six times.



7. Unpack the new drum cartridge and slide it into place, making sure not to touch the surface of the drum.



8. Turn the cartridge locking lever towards left until it sounds 'click'.



9. Close the front cover, then the side cover.

Note : If you do not reset the counter, Drum Warning may appear before the current drum cartridge's time is up.

4.6.10 Managing your machine from the website

If you have connected your machine to a network and set up TCP/IP network parameters correctly, you can manage the machine via Samsung's SynchThru Web Service, an embedded web server. Use SynchThru Web Service to:

- View the machine's device information and check its current status.
- Change TCP/IP parameters and set up other network parameters.
- Change the printer properties.
- Set the machine to send email notifications to let you know the machine's status.
- Get support for using the machine.

To access SynchThru Web Service:

1. Start a web browser, such as Internet Explorer, from Windows.
2. Enter the machine IP address (http://xxx.xxx.xxx.xxx) in the address field and press the Enter key or click Go.
   Your machine's embedded website opens.

4.7 Option Installing

Your machine is a full-featured one that has been optimized to meet most of your printing needs. Recognizing that each user may have different requirements, however, Samsung makes several accessories available to enhance your machine's capabilities.

This chapter includes:

- Precautions when installing accessories
- Installing a memory DIMM

4.7.1 Precautions when installing accessories

Disconnect the power cord

Never remove the control board cover while the power is being supplied.
To avoid the possibility of an electrical shock, always disconnect the power cord when installing or removing ANY internal or external accessories.

Discharge static electricity

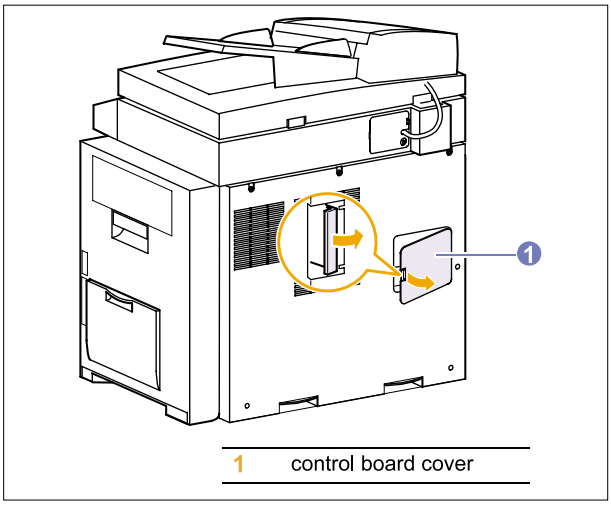
The control board and internal accessories (network interface card or memory DIMM) are sensitive to static electricity. Before installing or removing an internal accessories, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk round before finishing installation, discharge any static electricity once again.

4.7.2 Installing a memory DIMM

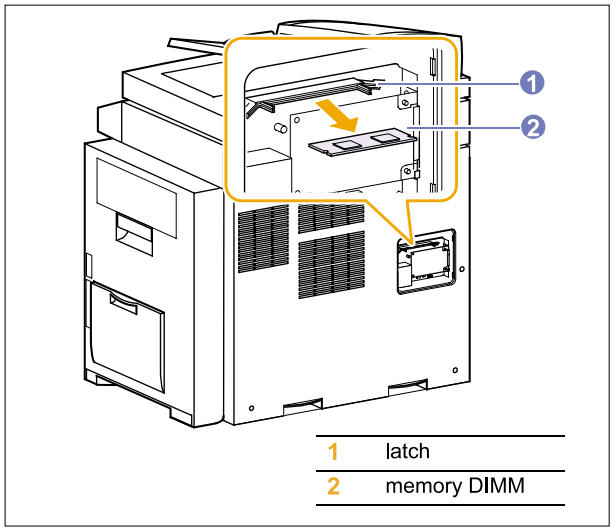
Your machine has a dual in-line memory module (DIMM) slot. Use this DIMM slot to install additional memory.
Your machine has 256 MB of memory which can be expanded to 384 MB.
This machine comes with 128 MB of on-board memory and a 128 MB DIMM. To expand the memory of your machine, you must remove the existing DIMM and purchase a larger one.
The order information is provided for optional memory DIMM.

1. Turn the machine off and unplug all cables from the machine.

2. Open the control board cover by grasping it and slide toward you.

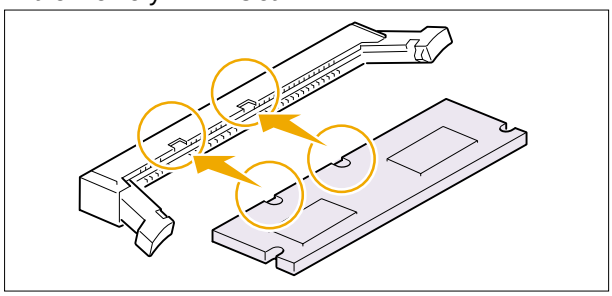


3. Completely open the latch on each side of the DIMM slot. Remove the preinstalled memory DIMM.



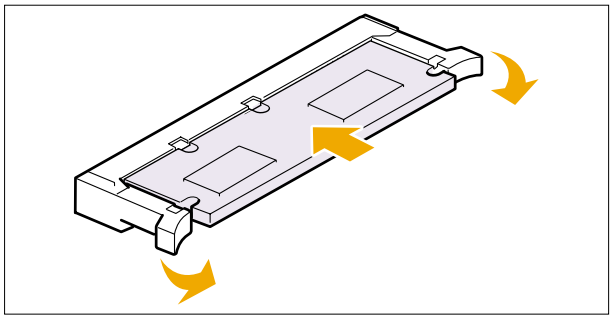
4. Take out a new memory DIMM from the plastic bag.

5. Holding the memory DIMM by the edges, align the notches on the memory DIMM with the grooves on the memory DIMM slot.

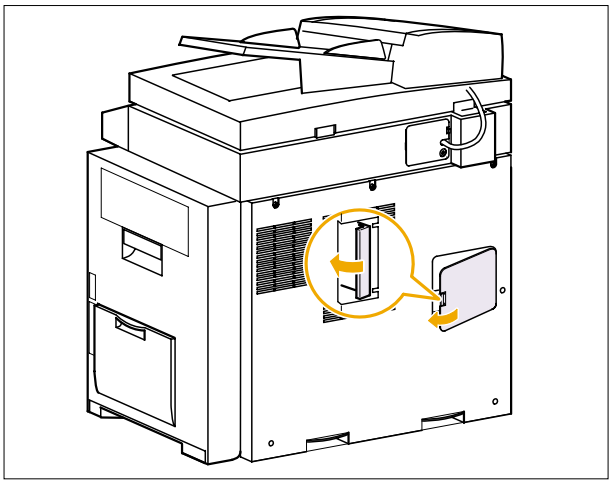


Note: The notches and grooves illustrated above may not match those on an actual DIMM and the slot.

6. Push the DIMM straight into the DIMM slot until it snaps into place. Make sure the latches fit over the notches located on either side of the DIMM.



7. Replace the control board cover.



8. Reconnect the power cord and printer cable, and turn the machine on.

4.7.3 Activating the added memory in the PS printerproperties

After installing the memory DIMM, you need to select it in the printer properties of the PostScript printer driver so that you can use it.

1. Make sure that the PostScript printer driver is installed on your computer.
   For details about installing the PS printer driver, see theSoftware Section.
2. Click the Windows Start menu.
3. For Windows 98/Me/NT 4.0/2000, select Settings and thenPrinters.
4 Select the Samsung SCX-6x45 Series PS printer.
5 Click the right mouse button on the machine icon and select Properties.
6. For Windows 98/Me, select Device Options. For Windows NT 4.0/2000/XP/2003, select Device Settings.
7. Select the amount of memory you installed from Printer Memory in the Installable Options section
   For Windows 98, select Installable Options > VMOption > changesetting for:VMOption > change memory.
8. Click OK.

4.8 Display LED and Error Messages

4.8.1 Display LED

The S a us LED on he con rol panel shows he s a us of your machine.
See he able below o know your machine's s a us.

ED or LED button	LED status		Description
Status (LED)	Off		Power Off
	Green On		Ready
	Green Blink		. Copy Mode : Copy job is in progress . Fax Mode : Fax job (RX, TX) is in progress . Scan / Email : Scan or Email job is in progress . Printing: - Slow Blinking : Data processing - Fast Blinking : Engine is printing
	Red On		Errors that need userís intervention such as paper jam, toner empty, tray empty, cover open
	Red Blink		Recoverable errors that userís intervention is not needed to recover happens such as paper mismatching. The machine is in the warning status such as end of consumables.
Power Saver (LED button)	Blue Off		The machine is not in power saver mode
	Blue On		The machine is in power saver mode
Interrupt (LED button)	Blue Off		The machine is not in interrupt printing mode
	Blue On		Then machine is in interrupt printing mode

4.8.2 Error Message

Messages appear on the Smart Panel program window or the control panel display to indicate the machine's status or errors. Refer to the tables below to understand the messages' meaning and correct the problem if necessary. Messages and their meanings are listed in alphabetical order.

Note : *When you call for service, it is very convenient to tell the service representative the display message.*

Messages in the colored cells are available only with SCX-6345N.

Display	Meaning	Suggested solutions
Ambient Temperature Sensor Fault	The sensor for the inner temperature of the machine is not working properly.	Turn the machine off and turn it on again.
BOOTP server error. An Auto IP address has been established.	BOOTP server does not work. The machine is working with auto IP setting function.	Set the network parameters again or assign a new static IP address.
BOOTP server error. An Auto IP is not working	The BOOTP server does not work, and the auto IP setting is failed.	Set the network parameters again or assign a new static IP address.
CCD Lock	The CCD (Charged Couple Device) lock has been locked. The CCD does not detect its home location or move.	Unlock the CCD lock. Or turn off the machine and on again. Try again.
Check Fax Kit	The fax kit is not installed, or the fax is not working properly.	Reinstall the fax kit.
Check Hard Drive	The hard disk drive does not work properly.	Turn the machine off and turn it on again.
Check Tray 2 Feed Area	Paper has jammed in the tray feed area. Or the tray cover is opened.	Clear the jam.
Check Tray 3 Feed Area		
Check Tray 4 Feed Area		
DADF Duplex Feeding Jam	The lead edge of the document failed to actuate the scan sensor within the correct time after actuating the duplex sensor.	Lift up the document input tray and remove the jammed original.
DADF Duplex Jam	The lead edge of the document failed to actuate the duplex sensor within the correct time when the document was fed the wrong way.	Lift up the document input tray and remove the jammed original.
DADF Exit Jam	The lead edge of the document failed to actuate the gate sensor within the correct time after actuating the scan sensor.	Open the DADF cover and remove the jammed original.
DADF Oversize Document Detected	Oversizeddocument or double-feeding of originals.	Open the DADF cover and remove the jammed original. Check the document size whether it is supported.
DADFRegistration Jam	The originals are jammed in DADF.	Open the DADF cover and remove the jammed original.

Display	Meaning	Suggested solutions
DHCP server error. An Auto IP address has been established.	DHCP server does not work. The machine is working with the setting IP by auto IP setting function.	Set the network setting again or assign a new static IP address.
DHCP server error. An Auto IP is not working.	The DHCP server does not work, and the auto IP setting is failed.	Set the network setting again or input the new static IP addre.
Drum Cartridge Initializi	It is the mixing time when installing the new drum cartridge up to 180 sec.	Wait about 180 seconds until the machine is ready.
Drum Communication Error	Communication between the drum cartridge and the machine has failed The drum cartridge is invalid.	Reinstall the drum cartridge. If the problem persists, replace it.
Drum Warning	The drum cartridge is near the end of its life.	Ensure a replacement cartridge in stock.
Duplex Jam 0	Paper has jammed during duplex printing.	Clear the jam.
Duplex Jam 1	Paper has jammed during duplex printing.	Clear the jam.
Duplex Jam 2	Paper has jammed during duplex printing.	Clear the jam.
Ejector Fault	Ejector unit is not operating.	Remove paper from the output tray (finisher). If this error message shows on the screen again, cycle power. If the problem persists, call for service.
Fax Memory is empty.	There is no more available fax memory. No more fax data can be received.	Delete the received fax data in the memory. Call for service to delete fax memory.
Fax Memory is low.	Available fax memory is now 1MB.	Delete the received fax data in the memory to secure memory.
Feed Jam at MP Tray	Paper Misfed from multi-purpose tray	Clear the jam.
Feed Jam at Tray 1	Paper misfed from tray	Clear the jam.
Feed Jam at Tray 2		
Feed Jam at Tray 3		
Feed Jam at Tray 4		
Finisher Duplex Jam	Paper jammed in the stacker.	Open the stacker door and remove jammed paper by lowering guide 1a or 1b.
Finisher Interface Error	Communication error has occurred between the stacker and the machine.	Turn the machine off and turn it on again.
Finisher Jam 0	Paper jammed in the stacker.	Open the stacker door and remove jammed paper by lowering guide 1a or 1b.
Finisher Jam 1		
Finisher Jam 2	Paper jammed in the stacker exit part.	Pull jammed paper from the stacker exit.
Finisher Stacker Full	The stacker is full of printouts.	Remove printouts from the stacker.
Front Jogger Fault	Front Jogger is not operating.	Open the finisher door and clear any jammed paper (if there is). If this error message shows on the screen again, cycle power.
Fuser error	There is a problem in the fuser unit.	Unplug the power cord and plug it back in.
Fuser High Error		
Fuser Low Error		
Fuser unit error		

Display	Meaning	Suggested solutions
GUI to MCB Communications Fault	A communication error has occurred.	Turn the machine off and turn it on again.
Install Drum Cartridge.	The drum cartridge is not installed, or the CRUM (Consumer Replaceable Unit Monitor) in the cartridge is not connected.	Install the drum cartridge. If it is already installed, try to reinstall the drum cartridge.
Install Staple Cartridge.	The staple cartridge is not installed.	Install the staple cartridge following the steps explained on the back of the finisher door. If you want to continue the print job and disregard of this error message, go to Admin Setting to adjust the option.
Install Toner Cartridge.	The toner cartridge is not installed or the CRUM (Consumer Replaceable Unit Monitor) in the cartridge is not properly connected.	Try to reinstall the toner cartridge.
Invalid Drum cartridge.	The drum cartridge you have installed is not for your machine.	Install a Samsung-genuine drum cartridge, designed for your machine.
Invalid Toner Cartridge	The toner cartridge you have installed is not for your machine.	Install a Samsung-genuine toner cartridge, designed for your machine.
IP address conflict	The IP address is used in other place elsewhere.	Check the IP address or obtain a new IP address.
Jam at Fuser	Paper has jammed in the fuser area.	Clear the jam.
Jam in Tray 2	Paper has jammed in the feeding area of the tray.	Clear the jam.
Jam in Tray 3		
Jam in Tray 4		
LSU Hsync Error	A problem has occurred in the LSU (Laser Scanning Unit).	Unplug the power cord and plug it back inches.
LSU Motor Error		
Main motor failure	There is a problem in the motor unit.	Unplug the power cord and plug it back in. If the problem still persists, please call for service.
MCB to DADF Communications Fault	The communication error has occurred.	Turn the machine off and turn it on again.
MCB to NIC Communications Fault		
MCB to Tray 2 Communications Fault		
MCB to Tray 3 Communications Fault		
MCB to Tray 4 Communications Fault		
MCB Watchdog Detects Software Failure	MCB software is not responding.	Turn the machine off and turn it on again.
Memory Failure	Memory access failed.	Turn the machine off and turn it on again.
Network cable is disconnected	The network cable is disconnected.	Connect the network cable properly.
Network card is not installed	The network card is not installed.	Install the network card.

Display	Meaning	Suggested solutions
Non Genuine Drum, Replace Drum	The drum cartridge installed is not a genuine cartridge. This message appears when you selected Continue at Non Genuine Drum, Replace Drum prompt.	Install the Samsung-genuine drum cartridge.
Non Genuine Drum, Replace Drum1	The drum cartridge installed is not a genuine cartridge. This message appears when you selected Stop at Non Genuine Drum, Replace Drum1 prompt.	Install the Samsung-genuine drum cartridge.
Non Genuine Toner, Replace Toner	The toner cartridge installed is not a genuine cartridge. This message appears when you selected Continue at Non Genuine Toner, Replace Toner prompt.	Install the Samsung-genuine drum cartridge.
Non Genuine Toner, Replace Toner1	The toner cartridge installed is not a genuine cartridge. This message appears when you selected Stop at Non Genuine Toner, Replace Toner1 prompt.	Install the Samsung-genuine drum cartridge.
Output Bin full	The printed papers are full on the output tray.	Remove printed outs from the output tray.
Paddle Fault	Paddle unit is not operating.	Open the finisher door and clear any jammed paper (if there is). If this error message shows on the screen again, cycle power.
Paper Sensed in DADF.	When the machine is on, jammed paper is detected in the DADF.	Open the DADF cover and remove the jammed original.
Rear Jogger Fault	Rear Jogger is not operating.	Open the finisher door and clear any jammed paper (if there is). If this error message shows on the screen again, cycle power.
Registration Jam	Paper has jammed in the registration area.	Clear the jam.
Replace Drum	The drum cartridge is at the end of its life. When the drum replacement. message appears on the screen and if you select Continue, this message displays.	Replace a drum cartridge with a Samsung-genuine drum cartridge.
Replace Drum1	The drum cartridge is at the end of its life. When the drum replacement. message appears on the screen and if you select Stop, this message displays.	Replace a drum cartridge with a Samsung-genuine drum cartridge.
Replace toner	The toner cartridge had run out at least once before.	Replace a drum cartridge with a Samsung-genuine drum cartridge.
Scan Feeding Jam	The lead edge of the document failed to actuate the scan sensor within the correct time after actuating the registration sensor.	Open the DADF cover and remove jammed original.
SMPS Fan failure	There is a problem with the SMPS (Switch Mode Power Supply) Fan.	Unplug the power cord and plug it back in.

Display	Meaning	Suggested solutions
Stacker Fault	Stacker unit is not operating.	Remove paper from the output tray (finisher). If this error message shows on the screen again, cycle power.
Stapler Empty	Stapler is run out.	Order Staple Cartridge. And replace it.
Stapler Fault	Stapler is not operating.	Remove paper from the output tray (finisher) and open the finisher door to clear the jammed paper. If this error message shows on the screen again, cycle power.
Support Finger Fault	Support Finger unit is not operating.	Remove paper from the output tray (finisher). If this error message shows on the screen again, cycle power.
Toner Cartridge Communication Error	Communication between the toner cartridge and the machine has failed.	Reinstall the toner cartridge. If the problem persists, replace it.
Toner Empty, Replace Toner1	The toner in the cartridge has run out. The machine stops print job.	Replace the toner cartridge with a Samsung-genuine toner cartridge.
Toner Low	The toner cartridge is almost empty.	Ensure a replacement cartridge is in stock.
Toner Page Count Reached, Replace Toner	The toner page count is expired. When the printed page related message appears on the screen, if you select Continue, this message displays.	When the toner pagecount reached message appears on the screen, press Continue to continue the printing job. Or replace a toner cartridge with a Samsung-genuine toner cartridge.
Toner Page Count Reached, Replace Toner1	The toner page count has expired. When the printed page related message appears on the screen, if you press Stop, this message displays.	Replace a toner cartridge with a Samsung-genuine toner cartridge.
Toner Sensor Error	The drum cartridge has some mechanical problem.	Turn the machine off and turn it on again. If the problem persists, replace the drum cartridge.
Toner Supply error	Not supplied toner to the drum cartridge.	Remove the sealing tape from the drum cartridge, and check the lever for the shutter on the toner cartridge.
Use Auxiliary Access	The credit is not enough to access the job according to Foreign Device.	Insert credit into the Foreign Device.

4.8.3 Machine Clean

- Clean every 10,000sheets or every 6months to maintain in good condition.
  (When the Transfer Roller expires due to long usage.)
- Clean in following order; Paper Path Parts, Transfer Roller, Toner Cartridge and Drum Cartridge in the Inner Frame.
- Clean with Vacuum Cleaner and Dry rag or Soft cloth.

4.8.3.1 Cleaning Instructions

1. Paper Path Parts

- Cleaning Kit : Vacuum Cleaner and Dry rag or Soft cloth.
- Mal Affects : Dust particles from paper can be copied at worst making spot stains on the paper.
- Follow the display listed on the figure below.

2. Cleaning-Transfer Roller

- Cleaning Kit : Vacuum Cleaner and Dry rag or Soft cloth.
- Mal Affects : Dust particles from paper can be copied at worst making spot stains on the paper.
- When exchanging the Transfer Roller clean the area.
- Follow the display listed on the figure below.

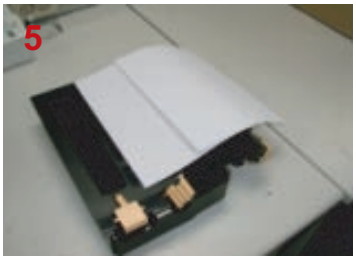
4. Cleaning-Frame Inside

- Cleaning Kit : Vacuum Cleaner and Dry rag or Soft cloth.
- Mal Affects : The toner can leak and pollute the interior, affecting the print quality.
- Recommend an Engineer or highly experienced worker to clean.

Open the Cover.

Remove the Cartridge.

Remove the Cartridge.



Cover with a piece of paper and lay it on a flat surface.

Clean the Paper Path Parts.

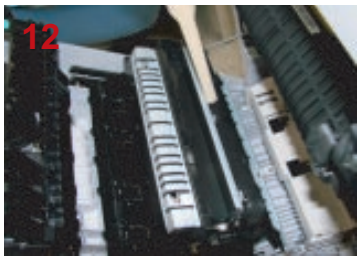
Clean the Paper Path Parts.

Clean the Paper Path Parts.

Release the Transfer Roller.

Clean the Transfer Roller Unit Parts.

Clean the Transfer Roller Unit Parts.



Clean the Transfer Roller Unit Parts.

Clean the Transfer Roller Unit Parts.

Reassemble the Transfer Roller.

Clean the Frame Inside.

Reassemble the Cartridge.

Reassemble the Cartridge.

4.8.3.2 Cleaning advisories of the parts.

1. Make sure the main cord is unplugged before the cleaning.

2. Do not use flammable liquid cleaner or spray products for cleaning.

3. Avoid making scratches while cleaning the parts.

4. Avoid direct contact by hand on the Transfer Roller.

5. Avoid exposing inner parts for a long duration of time.
   The surface of OPC Drum can be affected by direct light if exposed for a long time.
   (1~2 minutes is enough time for cleaning)

6. OPC surface must not be scratched.